DOCUMENT RESUME

ED 318 440 IR 014 347

TITLE	Instructional Support Academy. TEAMS Summer Academy, 1985-86. Final Report.
INSTITUTION	Houston Independent School District, Tex.
PUB DATE	86
NOTE	141p.; Photographs will reproduce poorly.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	*Academic Achievement; Adolescents; Computer Assisted Instruction; Computer Software; *Educational Innovation; *Experimental Teaching; Federal Aid; Junior High Schools; *Minority Groups; Multimedia Instruction; Program Descriptions; *Special Programs; State Programs; Student Attitudes; Teacher Attitudes; Test Wiseness
IDENTIFIERS	*Education Consolidation Improvement Act Chapter 2; Texas Educational Assessment of Minimum Skills

ABSTRACT

A special 6-week program, designed to increase the scores of low achieving minority eighth-grade students on the ninth grade Texas Education Assessment of Minimum Skills (TEAMS) Test, was implemented in 1986 in the Houston Independent School District as "Summer Academies." The students, who voluntarily enrolled in the program, were primarily those with limited English-speaking proficiency and those with low ability levels who were interested in improving. Funded by an ECIA (Education Consolidation Improvement Act) Chapter 2 Desegregation Assistance Grant, the project capitalized on the talents of enthusiastic teachers, the capabilities of computers, and multimedia curriculum materials. Teachers were given considerable freedom to design daily lessons and activities, enough time to insure that students received the maximum impact from the project, and all necessary materials and hardware. The TEAMS program concentrated on test taking skills, specific subject areas, and improving study skills and study habits. The enthusiasm of teachers was high throughout the program, and the strong dedication and high motivation of the students who attended the program for 5 hours daily, five times a week, was evident. Teachers noted improvement in students' attitudes about learning, increased self-confidence, and benefits derived from the use of a multimedia teaching approach. (18 references) (SD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED318440

IR014347

FINAL REPORT

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

INSTRUCTIONAL SUPPORT ACADEMY
ECIA, Chapter 2, Desegregation Assistance
Project No. 66680411

TEAMS SUMMER ACADEMY
Houston Independent School District
1985-86

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Richard A.Smith
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

DEPARTMENT OF TECHNOLOGY

Patricia Sturdivant, Deputy Superintendent

BOARD OF EDUCATION HOUSTON INDEPENDENT SCHOOL DISTRICT

Augustina (Tina) Reyes, President

Cathy H. Mincberg, Vice President

Elizabeth Spates, Secretary

Bobby Ann Peiffer, Assistant Secretary

Tarrant Fendley

Wiley E. Henry

Herbert Melton

Ray A. Morrison

Brad Raffle

ADMINISTRATION

Dr. Joan Raymond, General Superintendent

Ron E. Veselka, Executive Manager
Instructional Support

PROGRAM ADMINISTRATION

Sherry Irby, Project Administrator

Support Provided by the Instructional Development Group
Department of Technology

Richard Alan Smith, Technical Applications Manager
Ellen Murphy, Trainer IV-A
Fayette Clarke, Instructional Design Specialist
Janis Terry, Technical Writer

TABLE OF CONTENTS

Page

Introduction 1

Selection of Students 3
    Selection Research 3
    Selection Procedures 4
    Selection Timeline 5

Program Description 6
    Curriculum 6
    Instructional Design in the Content Areas 7
    Materials 7
    Study Skills Instruction 7

Schedule 9
    Instructional Time 9
    Planning and Development for Instructional Personnel 11

Site Descriptions 12

Personnel 13
    Project Administrator 13
    Department of Technology Resource Personnel 14
    Instructional Personnel 14

Budget 16
    Equipment, Materials and Supplies 16
    Personnel 16
    Amount Spent per Student 17

Evaluation 18

Conclusions 20
  Discussion 20

Projections 26

Bibliography 27

Schedules

Schedule A - TEAMS and Study Skills Objectives
Schedule B - Lesson Plans for Content Areas and Study Skills
Schedule C - List of Materials Used in Program
Software Correlations and Evaluations by Instructors
Schedule D - Student and Teacher Comments
Schedule E - TEAMS Status Reports
Schedule F - Research Results

TEAMS SUMMER PROJECT

Final Report

Introduction

A special program designed to increase the scores of low achieving minority eighth-grade students on the ninth grade Texas Education Assessment of Minimum Skills (TEAMS) Test was implemented in the summer of 1986 in the Houston Independent School District. The objective of the funding agency was to increase the academic ability of minority students so that they would be more likely to be successfully integrated into non-minority classrooms.

The project, funded by a Chapter 2 Desegregation Assistance Grant, was originally designed to support a year-long high school project. The proposal was amended to allow for a summer project that emphasized a partnership between teachers and technology utilizing the results of research in education.

When initial planning for the Summer TEAMS Project (as it soon came to be known) began, it became evident that this would be a unique opportunity to capitalize on the talents of enthusiastic teachers, the capabilities of computers, and a wealth of commercially available curriculum materials. Educational research was the basis for the project goals to ensure that the goals and expected outcomes were founded upon sound educational theory.

The project planners, the Instructional Development Group of the Department of Technology, Houston Independent School District (HISD), decided that:

- The teachers and Project Administrator would be given as much professional freedom as possible, within the boundaries of the project, to design the daily lessons and activities for the students.
- In addition to learning subject matter the students would be taught test taking skills.
- The students would also be taught study skills and would be motivated to continue good study habits throughout the next school year.
- Enough time would be allotted for the classes to insure that each student received the maximum impact possible from the project.
- The teachers would be supplied with all necessary materials and hardware.

At the start of the project teacher enthusiasm was high and it remained high as the teachers discovered that they were free to teach and design their instruction according to what their professional experience taught them would be ideal.

> Teachers should have ... a feeling for what data are and the uses to which they can be put; ... an ability to foster genuine creativity in students; and the ability to work with other people in work groups that decide for themselves how to get the job done. ... Teachers will not come to the school knowing all they have to know, but knowing how to figure out what they need to know, where to get it, and how to help others make meaning out of it. Teachers must think for themselves if they are to help others think for themselves, be able to act independently and collaborate with others, and render critical judgment. (*The Chronicle of Higher Education*, 1986, p. 45)

The teachers in the project were given the opportunity to demonstrate that they could function in the above role suggested by the report of the Carnegie Forum's Task Force on Teaching as a Profession (1986). The students were also very dedicated to the project as evidenced by their voluntary attendance for five hours a day, five days a week for six weeks, and by their achievements during the project.

Following is a detailed description of the Summer TEAMS project from its design stages to its implementation and evaluation. All sections are preceded by the appropriate section from the revised proposal and describe how the requirements of the section were met.

SELECTION OF STUDENTS

> At-risk students in middle schools with concentrations of minority student populations need a remediation/reinforcement program to improve English/language arts and mathematics skills in preparation for the TEAMS and other proficiency tests. Many of these students do not have financial resources and/or family support to repeat a school year, or perhaps even to graduate. Direct supplementary instruction designed to address their educational needs is essential for these students to complete high school. (Academic Support Project, Amended Schedule #4)

The students selected for the Summer TEAMS Project were eighth graders. Students in other grades were considered as the target population; however, the eighth graders were selected based on research completed by the Houston Independent School District.

Selection Research

Although overall test scores have been improving in the Houston Independent School District in recent years, district scores from the 1985-86 administration of the ninth-grade-level TEAMS test show 26 percent of the students tested did not master the mathematics portion. An equal percentage did not master the reading portion. An alarming 51 percent did not master the writing portion. When the scores are examined for students with limited English proficiency, the percentages escalate dramatically with 35 percent not mastering mathematics, 52 percent not mastering reading, and 71 percent not mastering writing. (HISD TEAMS Summary Report, 1986)

HISD has done seven Dropout Studies using information from the 1983-1985 school years. These studies showed that the highest percentage, 30.1 percent, of dropouts do so during the ninth grade year. In fact, almost 50 percent of the total number of dropouts left school during the ninth and tenth grades. Students from the Black and Hispanic ethnic groups comprise the majority of dropouts--38.1 percent are Black, 36.7 percent are Hispanic. (HISD Dropout Report #3, 1985) Good reading skills are essential to school success. The same Dropout Studies show that the majority, 86.8 percent, of Black and Hispanic dropouts were reading below the 50th percentile. (HISD Dropout Report #3, 1985)

One of the Dropout Studies involved a telephone survey of recent dropouts. This study indicated that most dropouts surveyed felt they would like to return to school (90 percent), desired a GED or diploma (80 percent), and felt they were in need of tutoring (76 percent) in either mathematics or reading. (HISD Dropout Report #7, 1986)

Our research indicated that:

1. Minority students at the ninth grade level are in need of special tutoring in the areas of mathematics, reading, and writing.
2. Minority students at the ninth grade level definitely compose an at-risk population that may leave the public school setting before their instructional needs can be met.
3. Some program is necessary to identify these at-risk students and meet their special needs.

These were the factors that led to the selection of eighth graders, about to enter the ninth grade, as the target population.

Selection Procedures

The procedure to select students and sites involved five phases:

a. Phase One--Identify Target Population

District statistics indicated a definite need for remediation and reinforcement on the ninth grade level. Using this information, it was decided to target students who would be entering ninth grade in the upcoming school year and were at-risk concerning performance on the ninth grade TEAMS test.

b. Phase Two--Establish Criteria for Selection of Students.

At-risk students on each of the campuses involved were identified and ranked in the following priority order of need:

- eighth graders who were repeating the eighth grade year; eighth graders whose standardized test scores have been below grade level;
- eighth graders whose report card grades indicated possible failure;
- eighth graders who were repeating eighth grade level English or mathematics courses;
- eighth graders whose standardized test scores and/or report card grades indicated they might fail the TEAMS test.

c. Phase Three--Select Sites

Sites for the Summer Academy were selected to best utilize existing facilities while keeping in mind the prime objectives of the program. Several middle schools that serve predominantly minority student populations were identified. This list was then narrowed further to include only those campuses which would be hosting a summer school session. Three sites were chosen in the final analysis.

d. Phase Four--Identify Possible Candidates

Identification of possible students meeting the established criteria was done on the campus level at the host schools by counseling staff, administrative personnel, and, when appropriate, parents/guardians. Staff members of neighboring schools within reasonable distances were also utilized concerning student selection at their schools. Since no funds were budgeted for student transportation, students taking part in the program would have to provide their own transportation to and from school.

e. Phase Five--Recruit Students

Students identified by the staff of the host school as possible candidates were notified of the existence of the program through one of two ways, written notification to the parents/guardians or conferences with the students and parents/guardians.

In addition to notification of specific students, efforts were made on a school-wide basis to recruit qualified students through other means. Announcements were made on the public address system, posters were put up throughout the school, handouts were sent to parents.

Students who contacted, or whose parents/guardians contacted, the school authorities were evaluated on their qualifications for the program.

A list of eligible students was then compiled by the school personnel using the priority order established. Students were informed of the times and places to report for the program.

Selection Timeline

The Instructional Development Group at the Department of Technology, HISD, was given the responsibility for this project in late May, 1986. Unfortunately this late assignment date allowed only minimal time for all phases of the student selection process. Although 144 students were targeted for program participation, limited lead time reduced this number to 40 actual participants. Many students already had summer work and/or travel commitments, while others had to attend regular summer school classes to make up the necessary subjects for promotion to the ninth grade. Had the lead time been two months rather than two weeks, the target number of 144 students would certainly have been reached.

The suggested time line for student selection for participation in future summer TEAMS projects is:

Phase One--Identify Target Population	Early April
Phase Two--Establish Criteria for Selection of Students	Early April
Phase Three--Select Sites	Mid-April
Phase Four--Identify Possible Candidates	Mid-April
Phase Five--Recruit Students	Late April-May

PROGRAM DESCRIPTION

Direct instruction will be provided for at-risk students whose academic performance indicated they may not achieve required minimum TEAMS scores or report card grades for graduation. Concentrated instruction in English/Language Arts, Mathematics and Study Skills will be provided by certified teachers. (Academic Support Project, Amended Schedule #4)

Curriculum

Instruction was provided in two main divisions: study skills and content areas (English/language arts and mathematics). Because research shows that teaching, or coaching, directly to achievement tests can significantly raise test scores (Bangert-Drowns, Kulik, and Kulik, 1983), ninth-grade TEAMS objectives were used for the content areas of language arts and mathematics.

Students must be taught effective study and work skills. This training should be introduced in the early grades and continued throughout the education experience (National Commission on Excellence in Education, 1983). Students have been shown to benefit from explicit training in the use of study strategies (Tennyson, 1978; Carrier and Titus, 1981). The problem areas pinpointed by the 1986 results of the ninth grade TEAMS test were distinguishing between fact and opinion, examining cause-effect relationships, and determining the author's point of view. Study skills involving text summary and use of text organization were targeted to address these areas (Taylor and Samuels, 1983).

Study skills objectives were drawn from the *hm Study Skills Program* developed by the National Association of Secondary School Principals (NASSP). This program includes instruction in listening, reading, and notetaking, as well as sections dealing with test preparation and taking, memory improvement, and effective use of time. It is not a remedial program, but is intended to improve the study skills of all students at any level (Hechinger, 1979). Because students seem to have special study skills needs in mathematics, the *hm Math Study Skills Program* , also developed by NASSP in conjunction with the National Council of Teachers of Mathematics, was used as well.

Lesson plans for the content areas were developed on a general level by the Instructional Development Group at the Department of Technology for all sites. They were purposely designed with room for modification on the part of each teacher so that, when the classes formed, instruction could be as individualized as possible. The time allotted for each objective was maximized, emphasizing the importance of the ratio of time actually spent on learning to time needed to learn (Gettinger, 1984).

Study skills were presented on a more structured basis, as lessons were developed during the preparation time before the students entered the program. Efforts were made to include reinforcement of these skills in the content area instruction to take advantage of the detached (specific skill) and embedded (application of that skill) approaches to study skills instruction (Derry and Murphy, 1986).

The TEAMS and study skills objectives used in planning the program are in Schedule A. The lesson plans for content areas and study skills are in Schedule B.

Instructional Design in the Content Areas

Each student was tested with diagnostic tests, some software-based and some teacher-designed. These tests were administered on an individual basis by the teachers. Good diagnostic software is not plentiful, but the teachers were fortunate to have such software for both reading and mathematics. The availability of computers and appropriate software was invaluable in pinpointing the problem areas for each student, and, in some cases, the software provided the lesson plan for the student to follow to address his or her special needs. The students also benefitted from immediate specific feedback on what had been attempted, an essential element in the learning process (Haney, 1985).

Individualized assignments for students were made by the teachers on the basis of these tests within the basic outline provided in the general lesson plans. No specific lesson plans were provided; rather teachers were encouraged to be creative with their prescriptive assignments. This professional freedom was greatly appreciated by the teachers and was highly successful in motivating the students involved.

Materials

Due to the unique and specific nature of this program, a multi-technology approach was judged to be the most desirable method of presentation for content area instruction. Types of instructional materials and supplies included computer software, print materials, audio cassette tapes, and videotapes. Close attention was given in selecting materials to assure that all necessary instructional objectives were addressed. Mathematics and language arts teachers were consulted, as well as an instructional design specialist, to insure that the materials used were the best available under the short implementation timeline.

A broad correlation of software materials to the TEAMS objectives was provided to the teachers for initial lesson preparation and planning purposes. On-going evaluation of materials by the instructional personnel was also emphasized. These evaluations, which included instructional strategies and comments, were shared among the entire instructional staff on a regular basis.

Schedule C includes a list of all materials used in the program, initial software correlations, and evaluations done by the instructors during the program.

Study Skills Instruction

One reason the students targeted in the project have not been successful academically is that they do not know how to learn. Successful students "have the need and the ability to learn all the time." (*The Chronicle of Higher Education*, p.45) Students today must learn how to determine what they need to learn, where to find the information, and how to make this information meaningful to them so that they can apply these processes to a constantly changing array of situations. In short, students today must learn how to learn.

Careful study and evaluation went into a selection of materials to be used for study skill purposes. It was decided that group instruction should be emphasized in this area and the materials selected were chosen with this in mind. A cohesive program was needed to give complete instruction in this area. The materials developed by the National Association of Secondary School Principals were the most appropriate for the purpose, especially since this program also included study skills for mathematics. These materials encouraged group participation and high levels of student involvement.

Additional materials were selected for use on a more individual basis to back up skills presented on the group level. These materials utilized a variety of technologies and emphasized skill development in following oral and written directions.

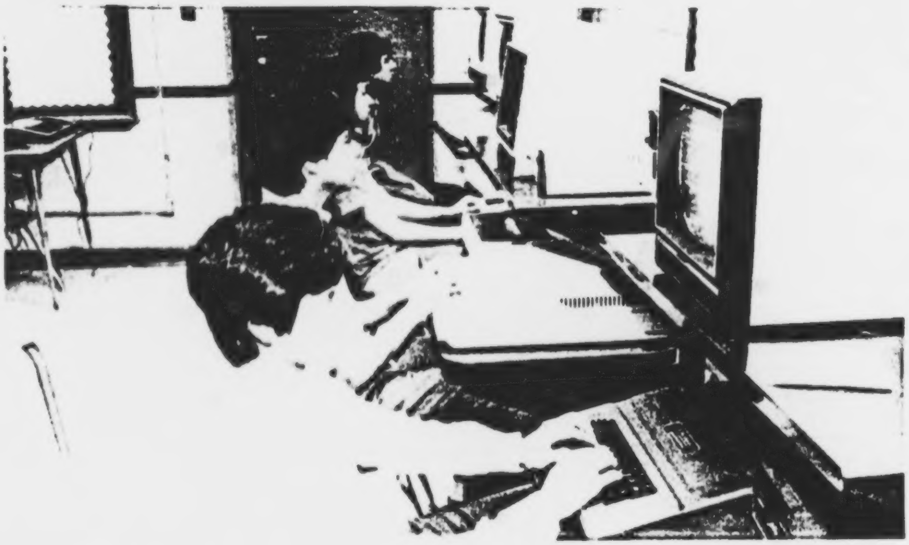
Schedule

> The structure of the periods allotted for instruction, planning, and travel may be flexible to allow teachers to meet with students, parents, and other staff as needed. The five hours of instructional time will be conducted from 7:30 am to 12:45 pm with two five minute breaks and one fifteen minute break. All instruction and materials will be in addition to what is provided by the student's regular instruction; the program will provide different approaches and additional time on task to address each student's needs. (Academic Support Project, Schedule #3-3G)

Instructional Time

The instructional time frame was dictated to a large extent by the schedule of the regular summer school classes being held in the schools. This summer school session was composed of five-hour days for a period of seven weeks. However, there was a large amount of flexibility encouraged within the given framework. Teachers were urged to take students on off-campus instructional field trips as well as to utilize on-campus resources outside the regular classroom. General guidelines for instructional time had been established in lesson plans, but again, these guidelines were extremely flexible.

All of the academies were housed in a single, well-equipped computer laboratory (details on page 16) where both teachers utilized a team teaching approach. This approach was affected by the individual, day-to-day needs of the students involved. The teachers assigned to each site were specialists in one of the two content areas. However, at all sites they worked together to give the students an integrated instructional package.



TEAMS students working in the computer classroom at Deady Middle School.

At the site where the student population was largest, two groups were formed (on the basis of diagnosed ability levels) and the teachers worked with each group on a rotating basis. (e.g., Group 1 would be doing writing work while Group 2 worked on their math objectives.) This approach worked well for several reasons. It decreased the number of students by half that the teachers were working with at any one time, and it allowed the teacher to focus on certain levels of instruction using small group instruction as well as individualized attention.

At the smaller sites, different organizational structures were used as the need arose. Sometimes entire days were devoted to writing exercises for all students. Large blocks of time were also allotted for the entire class to play mathematics or reading games. This flexibility was highly effective as it allowed for individualization and gave both students and teachers time to enjoy their learning situations. If a student was involved in a certain assignment, he or she did not have to stop because "the bell rang," but was encouraged to work on it until he or she was satisfied with a completed product.

Study skills were highly emphasized in this open setting. It was felt by teachers and students alike that learning how to learn was a worthwhile activity. Students played memory games to improve their retention skills, learned communication skills, and identified their own learning styles. All of these activities were done in a relaxed, open, give-and-take setting.

Planning and Development for Instructional Personnel

The teachers for this program were on duty for a total of approximately 8.5 weeks. This time consisted of seven weeks of instruction (5 hours of instructional time and1-2 hours of planning time per day) and an initial period of 8 days (6 hours per day) before classes began devoted to planning and development.

The teachers used the time prior to the beginning of classes to familiarize themselves with the curriculum and materials, to consult with one another concerning strategies, to write lesson plans, to correlate software and other materials with objectives, to organize facilities, to plan team teaching approaches, and to complete other tasks concerning instructional support. This planning time was judged by the teachers and administrators involved to be vital to the success of the program. In any individualized teaching situation, this type of preparation is neccessary. Instructional personnel must have complete information concerning all curriculum materials in order to accurately and efficiently utilize them to their full potential. Prescriptions for individual student needs must be based on a teacher's firm knowledge of the available curriculum and materials.

Daily planning time was utilized to plan individualization on a day-to-day basis. Diagnosis and prescription was an on-going activity, changing daily with the growth of the students involved. Planning at this level cannot be done ahead of time if it is to meet the needs of each student individually. Constant monitoring and adjusting of activities and strategies is necessary. Tracking of student progress was done at this time. Also, this time was used to prepare materials for planned activities. Field trips were arranged, handouts duplicated, software organized, and materials prepared.

Weekly meetings of all staff were held for program analysis. Strategies were shared, successes touted, problems analyzed, and solutions discussed. These meetings were of paramount importance in keeping all staff members current on program status and developments. They were also helpful to teacher morale. By sharing experiences, both positive and negative, the teachers helped one another and kept each other's enthusiasm at a high level. Time for teachers to think and plan, both alone and in collaboration, is widely recognized as an important part of the teaching process (Nelson, 1986). Team planning and deliberation has been shown to be extremely valuable to the overall professionalism of teachers (Lieberman, 1986).

The above mentioned structure of planning and development time, as well as the flexibility to plan and utilize a variety of activities, was a major contributor to the success of this program.

SITE DESCRIPTIONS

As was previously mentioned in this paper, site selection was done early in the planning stages of the program. The sites selected were alike in certain ways, yet different in others. The student populations of each site were largely minority students yet they were not of identical ethnic breakdown.

1. Campus 1: Ezekial W. Cullen Middle School
   6900 Scott
   Houston, Texas 77021-4899

   Number of students served: 20
   Number of students completing program: 5
   Ethnicity of students completing program: 4 Black, 1 Asian
   Sex of students completing program: 4 female, 1 male
   Room description: large double-size laboratory setup with 20 computers, 3 printers

2. Campus 2: James S. Deady Middle School
   2500 Broadway
   Houston, Texas 77017-1704

   Number of students served: 19
   Number of students completing program: 13
   Ethnicity of students completing program: 4 Asian, 8 Hispanic, 1 Black
   Sex of students completing program: 11 male, 2 female
   Room description: large double-size room, laboratory setup with 20+ computers, 8 printers

3. Campus 3: Alexander Hamilton Middle School
   139 E. 20th Street
   Houston, Texas 77018-2596

   Number of students served: 9
   Number of students completing program: 5
   Ethnicity of students completing program: 1 Asian, 2 Hispanic, 1 Black, 1 White
   Sex of students completing program: 2 male, 3 female
   Room description: regular classroom, laboratory setup with 20 computers, 4 printers

PERSONNEL

Project Administrator

The Project Administrator was Sherry Irby, a mathematics teacher and the Teacher Technologist at the Contemporary Learning Center Middle School. This unique center is designed to allow students with special learning needs to have the individualized attention and instruction necessary for their educational success. Since all teaching that takes place in the school must be individualized, Ms. Irby's experience in this type of curriculum design was invaluable in the organization and direction of the project. Ms. Irby has completed an intensive 296-hour training program provided by the Department of Technology, HISD, to earn the title of Teacher Technologist. This training involved all aspects of instructional computing as well as an introduction to other technologies used in education today.

As Project Administrator, Ms. Irby's responsibilities included:

- Curriculum development
    - develop general lesson plans
    - guide teachers in individualization techniques
- Materials acquisition and evaluation
    - work with Library Services, the Department of Curriculum and other District offices to acquire appropriate materials not budgeted in this proposal
    - evaluate materials used in program
- Project supervision and teacher technical assistance
    - site observations, weekly conferences
- Curriculum revision and adjustments as needed
    - revise and adjust lesson plans to allow for additional diagnosed areas of weaknesses
- Resource person for teachers
    - assist with student diagnosis and instructional individualization
    - follow-up on student progress and attendance
    - special student assistance (e.g., social services) to sustain student participation

Department of Technology Resource Personnel

The Instructional Development Group at the Department of Technology, HISD, was responsible for overall management of the project. The members of this group directly involved were:

- Dr. Richard Alan Smith--Technical Applications Manager
- Ellen Murphy--Trainer IVa
- Dr. Fayette Clarke--Instructional Design Specialist

Instructional Personnel

The instructors involved were certified in either language arts or mathematics at the secondary level. All had prior computer experience; four are Teacher Technologists. These instructors were assigned to the campuses involved as follows:

- Charles Robinson (Teacher Technologist)--Language Arts, Deady Middle School
- Steve Eisenberg--Mathematics, Deady Middle School

- Denise Jackson--Language Arts, Cullen Middle School
- Beatrice Franklin (Teacher Technologist)--Mathematics, Cullen Middle School

- Jamesetta Seals (Teacher Technologist)--Language Arts, Hamilton Middle School
- Terry Myers (Teacher Technologist)--Mathematics, Hamilton Middle School

As was previously stated, the teachers spent extensive planning and development time with curriculum materials before beginning classroom instruction. This was considered very important for the individualization of instruction. Constant monitoring and adjusting of instruction was also necessary.

TEAMS Summer Academy teacher Charles Robinson is ready to give assistance to students when the need arises.

The primary responsibilities of the teachers were as follows:

- Instruction
- Curriculum development (lesson plans)
- Materials evaluation for instructional suitability
- Student diagnosis and prescription
- Instructional individualization
- Record-keeping with regards to student progress and attendance
- Needs assessment for additional instructional materials and supplies

BUDGET

Equipment, Materials, and Supplies

Since the project was conducted in middle schools already equipped with Computer Learning Centers (CLC), these classrooms included all equipment necessary to facilitate a multi-media individualized learning program. Although not all CLC's are exactly alike, the following minimum configuration was available to administer the Summer TEAMS project as originally planned with 48 students per site:

20 Apple IIe microcomputer systems (combination color and monochrome)
3 Printers (ideally equipped with A-B switch boxes)
1 Video cassette player (1/2-inch VHS)
1 25-inch color monitor
2 Audio cassette players
1 Overhead projector
1 Screen
6 Tables
48 Chairs
2 Teacher's desks
2 Teacher's chairs
1 4-drawer file cabinet

As was previously stated, Schedule C includes a list of all materials used in the project. Amounts spent for materials are categorized below:

• Supplies (paper, notebooks, pencils, etc.)	$ 1,503.84
• Books (workbooks, games, etc.)	2,749.10
• Software and video materials	13,815.94
Total	$ 18,068.88

The majority of the materials remained in the schools hosting the summer programs, but a complete set of materials is available for examination in the Resource Library at the Department of Technology, HISD. The items used in the project were, for the most part, nonconsumable; therefore, the participating schools can make good use of them throughout the regular school year.

Personnel

The total payroll for the project was $23,467.95. Travel costs for the teachers and the administrator totaled $243.47.

Amount Spent per Student

The total cost of the project was $41,779.83. The amount spent per student in the program was $1044.50, but this figure is deceptive. Materials were ordered to accommodate 144 students in the program, but only 40 participated. Had the projected number of students been reached, cost per student would have been reduced to $ 290.14. Fortunately, hardware and facilities for the program were readily available, but the materials purchased specifically for the program can be used over and over, either in future academy implementations or in regular classes. As an interesting sidenote, according to HISD's Public Information Office, the amount spent by the district per student in 1985-86 was $2720.00.

EVALUATION

> Major Objectives:
> 1) To identify students enrolled in middle schools with concentrations of minority students who are most at-risk of failure to graduate, as indicated by their record of academic performance and standardized test scores.
> 2) To design and implement a supplementary program scheduled for summer for remediation/reinforcement of at-risk students' educational weaknesses.
> 3) To improve the percentile ranking, relative to group norms, of at least 70% of the at-risk students who have participated in the program, as measured by proficiency tests and/or standardized test scores. (Academic Support Project, Amended Schedule #4)
>
> Evaluation Strategy: The evaluation of the Instructional Support Academies Project will focus on the three objectives. The summative evaluation component will consist of measuring specific outcomes related to program success based on the instructional objectives. The process evaluation component will consist of monitoring the stated objectives to determine whether the program has been implemented correctly. A final report on the project will be submitted to TEA at its completion. (Academic Support Project, Amended Schedule #4C)

Evaluation of the degree to which the first two major objectives were met is easy. For Objective 1 the at-risk students in middle schools with concentrations of minority enrollment were identified by their counselors through the use of academic performance records and standardized test scores, which were readily available at each school site. These identified students were contacted and urged to participate in the program. As was previously stated, the short implementation timeline was largely responsible for the small numbers of students who were actually able to participate.

Major Objective 2, the design and implementation of the program, was met. Outlines, designs, timelines, lesson plans, software correlations, summaries, and the like are included as part of this report.

Attainment of the third major objective was impossible to determine since the California Test of Basic Skills (CTBS) was chosen on the basis of availability rather than applicability and did not measure all of what had been taught. Forty students participated in the program, but, of those, only seventeen completed the California Test of Basic Skills. This is much too small a group from which to generalize any viable conclusion from the data. However, the Houston Independent School District's Research Department was pleased with the direction of the results and has recommended expansion of the model. Performance on those CTBS objectives which matched ninth grade TEAMS objectives was analyzed by the Houston Independent School District Research Department, and the results of this analysis are in Schedule F. Teacher observations are available, however, and the teachers were greatly impressed with the achievement of the students.

The following teacher comments indicate their reactions to student performance:

> As the weeks passed, we noticed that all of the students had shown great improvement in grammar, and they no longer were hesitant about writing. ... After having read my sample, one young lady spent three hours at the computer perfecting her diary. ...The technology not only allowed us to pinpoint each student's weaknesses, but also to

> concentrate on eradicating those deficits. ... Our Vietnamese student used ... Crossword Magic ... to make puzzles ... that he passed out to neighborhood kids. A few days later, several Vietnamese students visited our lab, and ... made [more] crossword puzzles ...
>
> Denise Jackson/Beatrice Franklin

> When a group of about twelve students entered my computer room ... I suddenly felt my anxiety being replaced by excitement and anticipation. ... [The students were] going to be a group of basically cooperative, motivated youngsters who were willing to work hard to raise their academic achievement level. ... [One group] became quite cohesive for middle school children, engaging in peer tutoring and competition to see who would make the highest grades, grasp new concepts with the most ease, etc. During the entire summer, these children did not compile more than a small number of absences among them. ... We would have to characterize this program at Deady as successful. The small class sizes may not have made the project very cost effective, but they did enable Mr. Eisenberg and me to engage in some intensive math and language tutoring with these children that we feel they may well remember for the rest of their lives.
>
> Charles Robinson/Steve Eisenberg

> With the small groups ... students appeared to feel less inhibited about asking questions and expressing their opinions. With this arrangement, more opportunities for assistance with oral reading and comprehension were available in both English and math. ... this intimate interaction enabled teachers to watch facial expressions, ... to fill in educational gaps... In addition, teachers counseled the students when the topic of drugs arose. ... By working together in the same room, students observed the relationship in the two content areas, such as reasoning in math and drawing logical conclusions in language arts.
>
> Terry Myers/Jamesetta Seals

Complete statements from the teachers are in Schedule D.

CONCLUSIONS

The TEAMS Summer Academies were the "perfect" educational setting. Small classes, large variety of curriculum materials, teacher flexibility, individualization, team teaching, interested and highly-motivated students, and an informal classroom atmosphere were just a few of the outstanding attributes of this program.

Learning was fun and interesting to the students involved. They were not being forced to attend this program. Attendance at the academies was entirely voluntary, and students received no formal academic credit. There was no charge to the students, and they were receiving instruction from highly-trained and enthusiastic teachers. Studies of teacher motivation emphasize that what teachers want most from their work is the intrinsic satisfaction which comes from their contributions to student achievement (Hawley, 1985). The attitudes of the teachers were mirrored in the attitudes of the students, who enjoyed themselves and learned much more effectively.

This program was observed to be successful. The students' attitudes toward school and learning were greatly improved. Below are some of the students' comments:

> While I was here with the program, I was comfortable with the materials and the teachers. When I first started, I had no idea that it would have been this great.
>
> At the end of the program we learned a lot about computers. It was really fun coming here. I hope they have another TEAMS summer program again next year.
>
> The Summer TEAMS Program was fun and helpful to me. I really enjoyed coming. It was the best.
>
> I enjoyed the program a lot. It helped me learn what I needed to practice on.
>
> In English I feel like *noun* is my first name, *verb* is my middle name, and *adjective* is my last name...
>
> The two nicest teachers in the world for the Summer TEAMS Program are [teachers' names]...At the end of the program we had a test, and it was easy.

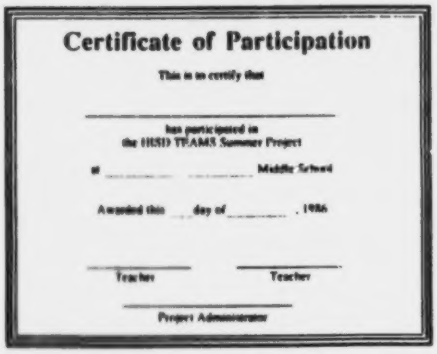
Discussion

Many of the students working in this program entered with questionable attitudes toward education in general due to their learning difficulties. The students enrolled in the program fell into two main categories: 1) those with limited English proficiency, and 2) those with low ability levels. Both groups were interested in raising their academic achievement levels. The learning strategies and techniques learned by the students in the study skills section of the curriculum should help them to do just that.

The two groups mentioned above made the individualized approach a necessity if all students were to benefit. The students responded well to this approach. They came to realize that they could work comfortably without a lot of peer pressure. The informal atmosphere of the classroom also contributed to this attitude. An excellent teacher-student relationship was developed at all sites. Teachers could function more as facilitators of learning, and they could get closer to each student on an individual basis. As this closer relationship developed, students became less inhibited, asked more questions, expressed more opinions, and interacted in a more productive manner. Teachers made conscious efforts to raise the self-expectancies of the students. Many academic reinforcement programs concentrate on student weaknesses at the expense of achievement helping to perpetuate a self-defeating attitude in the student (Haynes and Johnson, 1983). The academies provided the arena for the development of high self-expectations by the students as well as the necessary support for achieving what the students were coming to expect. The efforts made to directly motivate the students through positive reinforcement of their achievement potential translated into giant academic steps for them.

Students did not receive academic credit for attendance at the academies; therefore, there was no need for grades. Coleman (1961) found that many low achievers resent their academically successful peers enough to completely withdraw from academic competition. These students form their own peer groups and pursue success in other areas, many of which have no relationship or place in the school setting (Castenell, 1983). Castenell also found that race, sex, and socioeconomic class have major influence on academic achievement, but that the development of cooperation and interdependence can be an important motivational factor fostering academic achievement. The academy teachers took advantage of this within the structure of the project and found that students indeed formed cohesive, yet academically competitive, groups within the program.

One positive reinforcement that was an unexpected reward for the students was the awarding of t-shirts and trophies to students who completed the program with a good attendance record. These students were presented with a TEAMS t-shirt and a small, inexpensive trophy on the last day of instruction. Students who attended classes on an irregular basis were given a certificate of participation to recognize the efforts they made during the summer. The t-shirts and trophies were purchased with project funds, and the small amount of money required for these symbols of achievement appeared to be justified based on the students' reactions at the presentation ceremonies.



Certificate of Participation

This is to certify that

____

has participated in
the HISD TEAMS Summer Project

at _______________ Middle School

Awarded this ___ day of ________, 1986

_______________ Teacher

_______________ Teacher

_______________ Project Administrator

Certificates like the one above were issued to participants who did not complete the program.

Students at the TEAMS Summer Academy's Cullen site proudly display their t-shirts and trophies. Teachers Denise Jackson (far left) and Beatrice Franklin (far right) and Project Administrator Sherry Irby (second from left) are pictured with the students.

TEAMS Summer Academy students at the Hamilton site show off their t-shirts while posing with Project Administrator Sherry Irby and Instructors Terry Myers and Jamesetta Seals (located in the back row) on the last day of instruction.

TEAMS Summer Academy students at the Deady Middle School site display their t-shirts which were presented to them by Project Administrator Sherry Irby and their teachers Stephen Eisenberg and Charles Robinson (back row, far left).

We believe the improvement in the students' attitudes will directly affect two things: 1) their future academic performance, and 2) their personal goals. These students often did not perceive their school time as being effectively spent, and, as student attitudes and teacher attitudes are inevitably intertwined (Hawley, 1985), also perceived, perhaps incorrectly, that school personnel were not interested in them personally. Some of these students were not interested in continuing school and were prime dropout candidates. With a more confident self-image in place, it is expected that several students that might have otherwise not finished school will now do so.

Also, those students who had problems because of language deficiencies were observed as being more self-confident in their written and verbal communication skills. One young Asian student would not write a single sentence when he entered the program. Yet, by the end of the summer session, he was not only writing essays, but he was sharing his new-found skills with his family and friends by creating computer-generated crossword puzzles. He even created vocabulary flash cards to teach his primary language to other students.

Another successful aspect of this program, which is not directly measurable, is the benefit of acquainting students with the world of technology through a multi-media teaching approach. The wide variety of instructional materials used in this program helped to motivate the students and interest them in new things.

The use of the word processor is a prime example of this; writing became so much more pleasant as it was made easier by the word processor's capabilities. When a student hand-writes a composition, revision is a tedious process, and sometimes reading it is next to impossible for the teacher. Teacher comments on both content and editing can give the student too much feedback at a time when the student, having just put forth tremendous effort, is hardly amienable to criticism (Lesgold, 1986).

With word processing, the teacher can read a composition much more easily, and students can respond easily to correction of one or two problems at a time. Also students can readily see how one change can affect an entire piece of writing. The students became adept at using the computers and the word processing program with a minimum of instruction.

TEAMS Summer Academy students completing assignment at the Cullen site.

Although the numbers of students served by this program were small, the results were positive and significant. The benefits were not tangible, but they were very observable in the students. The students themselves acknowledged the many good things about the program. The comments of the students and teachers alike were very gratifying. The unanimous opinion was that the summer was well spent. All came away feeling that they had participated in a rewarding experience.

Student and teacher comments are in Schedule D.

PROJECTIONS

Hopefully this report will not mark the end of this special program. Students and teachers who participated were impressed with the value of programs like this. Below are some possible outgrowths of what this summer program has suggested:

- Expansion of summer academy program into additional sites as an integral part of middle school summer school offerings serving at-risk students in community centers or schools.
- Continuation of similarly structured program throughout the school year on an after-school basis.
- TEAMS preparation during state-mandated tutorial period.
- Use of the study skills program to be used in schools to enhance study and test-taking skills. This could be taught during the tutorial period or integrated into the curriculum of various content areas.
- Application of curriculum materials and strategies to general remediation programs. This could be administered during a tutorial period with a laboratory setup or in individual classrooms under the direction of content area instructors.
- Application of program design and curriculum materials in an adult literacy program.

REFERENCES

Bangert-Drowns, Robert L., Kulik, James A., and Kulik, Chen-Lin C. "Effects of Coaching Programs on Achievement Test Performance." *Review of Educational Research.* LIII, 4. (Winter, 1983), 571-585.

Carrier, Carol and Titus, Amy. "The Effects of Notetaking Pretraining and Test Mode Expectations on Learning from Lectures." *American Educational Research Journal.* XVIII,4. (Winter, 1981), 385-397.

Castenell, Louis A. "Achievement Motivation: An Investigation of Adolescents' Achievement Patterns." *Educational Research Journal.* XX, 4. (Winter, 1983), 511-516.

Coleman, James S. *The Adolescent Society.* New York: Free Press, 1961.

Derry, Sharon J. and Murphy, Debra A. "Designing Systems that Train Learning Ability: From Theory to Practice" *Review of Educational Research* . LVI, 1. (Spring, 1986), 1-39.

Gettinger, Maribeth. "Achievement as a Function of Time Spent in Learning and Time Needed for Learning." *American Educational Research Journal.* XXI, 3. (Fall, 1984), 617-628.

Haney, Walt. "Making Testing More Educational." *Educational Leadership.* XLIII, 2. (October, 1985), 4-13.

Hawley, Willis D. "Designing and Implementing Performance-Based Career Ladder Plans." *Educational Leadership.* XLIII, 3. (November, 1985), 57-61.

Haynes, Norris M., and Johnson, Sylvia T. "Self- and Teacher Expectancy Effects on Academic Reinforcement Program." *Educational Research Journal.* XX, 4. (Winter, 1983), 511-516.

Hechinger, Fred M. "How to Study: Guides Focus on Basics." *New York Times.* September 11, 1979.

"HISD Dropout Report, #3." *Report on Regional High-Technology Delivery System for Adult Literacy, Appendix I.* (Summer, 1986).

"HISD Dropout Report, #7." *Report on Regional High-Technology Delivery System for Adult Literacy, Appendix I.* (Summer, 1986).

Lesgold, Alan M. "Preparing Children for a Computer-Rich World." *Educational Leadership.* XLIII, 6. (March, 1986), 7-11.

Lieberman, Ann. "Collaborative Research: Working With not Working on..." *Educational Leadership.* XLIII, 5. (February, 1986) 28-32.

National Commission on Excellence in Education, 1983.

Nelson, Barbara Scott. "Collaboration for Colleagueship: A Program in Support of Teachers." *Educational Leadership*. XLIII, 5. (February, 1986), 50-52.

Taylor, Barbara M., and Samuels, S. Gay. "Children's Use of Text Structure in the Recall of Expository Material." *American Educational Research Journal*. XX, 4. (Winter, 1983), 517-528.

Tennyson, R. D. "Pictorial Support and Specific Instructions as Design Variables for Children's Concept and Rule Learning." *Education Communications and Technology Journal*. XXVI. (1978), 291-299.

SCHEDULE A

TEAMS AND STUDY SKILLS OBJECTIVES

LIST OF OBJECTIVES

GRADE 9

READING

Objective 1: Identify the meaning of words with academic and practical applications.

Objective 2: Identify significant details.

Objective 3: Identify the sequence of events.

Objective 4: Identify the main idea.

Objective 5: Distinguish between fact and opinion.

Objective 6: Identify cause-and-effect relationships.

Objective 7: Identify the author's point of view and/or purpose.

Objective 8: Draw logical conclusions.

Objective 9: Identify accurate generalizations from a given series of details and/or assumptions.

Objective 10: Identify various sources to locate information.

Objective 11: Use graphic sources to get information.

LIST OF OBJECTIVES

GRADE 9

WRITING

Objective 1: Recognize the correct spelling of commonly used words.

Objective 2: Demonstrate knowledge of standard punctuation.

Objective 3: Demonstrate knowledge of standard uses of capitalization.

Objective 4: Demonstrate knowledge of correct English usage.

Objective 5: Demonstrate the ability to distinguish complete sentences from fragments and/or run-ons.

Objective 6: Demonstrate the ability to proofread a written statement.

Objective 7: Write a composition to describe an object or picture.

Objective 8: Write a composition to tell how to do something.

Objective 9: Write a composition in which two or more ideas/objects/places are classified according to specified criteria and described.

Objective 10: Write a composition in which a choice is made and reasons that would convince a specified audience are presented.

Objective 11: Write a composition which discusses two opposing courses of action and is designed to convince a specified audience to follow one of the those courses.

LIST OF OBJECTIVES

GRADE 9

MATHEMATICS

Objective 1: Identify the relationship between decimals, fractions, and percents.

Objective 2: Determine simple probabilities.

Objective 3: Add and subtract fractions.

Objective 4: Multiply and divide decimals.

Objective 5: Solve two- or three-step word problems using the basic operations.

Objective 6: Solve word problems using ratios, proportions, and percents.

Objective 7: Solve personal finance problems.

Objective 8: Find the areas of rectangles and triangles.

Objective 9: Solve word problems involving metric/customary measurements using the basic operations.

Objective 10: Use information from charts or graphs to solve word problems.

Objective 11: Use formulas to solve problems.

List of Objectives

Study Skills

1. Learning to Listen--Hearing *and* understanding or appreciating
2. Vocabulary (Getting Meaning from Context)--Examining context to develop a working definition for an unknown or unfamiliar word
3. Vocabulary (Literal and Figurative Meanings)--Understanding *and* using the relationship between literal and figurative meanings of words
4. How Do *You* Study?--Increasing student awareness of how he or she learns most effectively and discovering how to overcome obstacles to his or her own learning
5. Improving Your Memory--Using mnemonics
6. Preparing for and Taking Tests: Objective Questions--Organizing thoughts and understanding various kinds of test questions and the answers they require

SCHEDULE B

LESSON PLANS FOR CONTENT AREAS AND STUDY SKILLS

Curriculum Outline--TEAMS Project

Allocated Time: 5 hours daily

Time schedule:

1 hour Study Skills
3 hours Instruction
1 hour Testing

DATE	READING	WRITING	MATH
6/19-20	Study Skills-- three lessons on each skill from NASSP Study Skills Program Learning to Listen (Unit 1, pgs. 4-6 and Unit 1, page 7) Vocabulary: Getting Meaning from Context (Unit 2, pgs. 8-12 and Unit 2, pgs. 13-17) How to Study (Unit 7, pgs. 48-52 and Unit 7, pgs. 52-54 - Exercise 5 on)		
	Testing	Testing	Testing
	Word Meanings (1)	Spelling (1)	
6/23-27	Study Skills--three lessons on each skill from NASSP Study Skills Program Solving Problems (Unit 6, pgs. 40-44 and Unit 6, pgs. 45-47) Improving Your Memory (Unit 8, pgs. 55-61 and Unit 8, pgs. 61-64) Preparing For and Taking Test (Unit 10, pgs. 73-78 and Unit 10, pgs. 79-84)		
	Word Meaning (1)	Spelling (1)	
	Comprehension (2)	Punctuation (2)	Decimals etc. (1)
	Sequence of events (3)	Sentence Fragments (5)	Fractions (3)
	Testing	Testing	Testing
6/30-7/4	Study Skills Practice		
	Word Meanings (1)	Spelling (1)	
	Main Idea (4)	Capitalization (3)	Probabilities (2)
	Author's viewpoint (7)	Proofreading (6)	Decimals (4)
	Testing	Testing	Testing

7/7-11	Study Skills Practice		
	Word Meanings (1)	Spelling (1)	
	Fact & Opinion (5)	Correct Usage (4)	Word Problems (5)
	Cause & Effect (6)	Descriptive Writing (7)	Word Problems (6)
	Testing	Testing	Testing
7/14-18	Study Skills Practice		
	Word Meanings (1)	Spelling (1)	
	Logical Conclusions (8)	How-to Composition (8)	Personal Finance (7)
	Generalization (9)	Ideas Classified (9)	Areas (8)
	Testing	Testing	Testing
7/21-25	Study Skills Practice		
	Word Meanings (1)	Spelling (1)	Metric (9)
	Locate Information (10)	Persuasive writing (10)	Charts & Graphs (10)
	Testing	Testing	Testing
7/28-8/1	Study Skills Practice		
	Word Meanings (1)	Spelling (1)	Formulas (11)
		Argument (11)	
	Testing	Testing	Testing
8/4-6	Review	Review	Review
	Testing	Testing	Testing

DAILY LESSON PLAN

DATE: 6/19/86

TOPIC	TIME
Introduction to Program	1 hour
Study Skills Lesson 1	1 hour
Diagnostic Testing	3 hours

DAILY LESSON PLAN

DATE: 6/20/86

TOPIC	TIME
Meeting with Parents	1 hour
Study Skills Lesson 2	1 hour
Diagnostic Testing	3 hours

DAILY LESSON PLAN

DATE: 6/23/86

TOPIC	TIME
Study Skills Lesson 3	1 hour
Instructional Time (Individual lessons as prescribed by diagnostic testing)	
Reading Objective 1 Word Meaning Objective 2 Comprehension Objective 3 Sequence of Events	1 hour
Writing Objective 1 Spelling Objective 2 Punctuation Objective 5 Sentence Fragments	1 hour
Mathematics Objective 1 Decimals Objective 3 Fractions	1 hour
Testing	1 hour

DAILY LESSON PLAN

DATE: 6/24/86

TOPIC	TIME
Study Skills	1 hour
Lesson 4	
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 2	
Comprehension	
Objective 3	
Sequence of Events	
Writing	1 hour
Objective 1	
Spelling	
Objective 2	
Punctuation	
Objective 5	
Sentence Fragments	
Mathematics	1 hour
Objective 1	
Decimals	
Objective 3	
Fractions	
Testing	1 hour

DAILY LESSON PLAN

DATE: 6/25/86

TOPIC	TIME
Study Skills	1 hour
Lesson 5	
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 2	
Comprehension	
Objective 3	
Sequence of Events	
Writing	1 hour
Objective 1	
Spelling	
Objective 2	
Punctuation	
Objective 5	
Sentence Fragments	
Mathematics	1 hour
Objective 1	
Decimals	
Objective 3	
Fractions	
Testing	1 hour

DAILY LESSON PLAN

DATE: 6/26/86

TOPIC	TIME
Study Skills	1 hour
Lesson 6	
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 2	
Comprehension	
Objective 3	
Sequence of Events	
Writing	1 hour
Objective 1	
Spelling	
Objective 2	
Punctuation	
Objective 5	
Sentence Fragments	
Mathematics	1 hour
Objective 1	
Decimals	
Objective 3	
Fractions	
Testing	1 hour

DAILY LESSON PLAN

DATE: 6/27/86

TOPIC	TIME
Study Skills	1 hour
Lesson 7	
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 2	
Comprehension	
Objective 3	
Sequence of Events	
Writing	1 hour
Objective 1	
Spelling	
Objective 2	
Punctuation	
Objective 5	
Sentence Fragments	
Mathematics	1 hour
Objective 1	
Decimals	
Objective 3	
Fractions	
Testing	1 hour

DAILY LESSON PLAN

DATE: 6/30/86

TOPIC	TIME
Study Skills	1 hour
Lesson 8	
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 4	
Main Idea	
Objective 7	
Author's viewpoint	
Writing	1 hour
Objective 1	
Spelling	
Objective 3	
Capitalization	
Objective 6	
Proofreading	
Mathematics	1 hour
Objective 2	
Probabilities	
Objective 4	
Decimals	
Testing	1 hour

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 1	Word Skills SRA-Level 1 Word Skills SRA-Level 2 Word Herd--Sound Alikes Word Herd--Look Alikes Synonym Drill Vocabulary Flash Cards Word Wars Crossword Magic Word Attack Missing Links-Eng. Editor Missing Links-Young People Missing Links-Classics	
Reading 4	Diascriptive Reading II	
Reading 7	Diascriptive Reading II Critical Reading	

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 1	Word Wizards Spelling Volume 2 Word Wars Synonym Drill Vocabulary Flash Cards Miss Spelling Bee Crossword Magic Word Attack Junior High Language Arts	
Writing 3	Junior High Language Arts	
Writing 6	Junior High Language Arts	

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 2		
Math 4	Computerized Math-Level 7 Estimation-MECC Multiplication Helper Addition Helper Math Olympics Computer D/I SRA-Level C	

DAILY LESSON PLAN

DATE: 7/01/86

TOPIC	TIME
Study Skills	1 hour
Lesson 9	
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 4	
Main Idea	
Objective 7	
Author's viewpoint	
Writing	1 hour
Objective 1	
Spelling	
Objective 3	
Capitalization	
Objective 6	
Proofreading	
Mathematics	1 hour
Objective 2	
Probabilities	
Objective 4	
Decimals	
Testing	1 hour

DAILY LESSON PLAN

DATE: 7/02/86

TOPIC	TIME
Study Skills Lesson 10	1 hour
Instructional Time (Individual lessons as prescribed by diagnostic testing)	
Reading Objective 1 Word Meaning Objective 4 Main Idea Objective 7 Author's viewpoint	1 hour
Writing Objective 1 Spelling Objective 3 Capitalization Objective 6 Proofreading	1 hour
Mathematics Objective 2 Probabilities Objective 4 Decimals	1 hour
Testing	1 hour

DAILY LESSON PLAN

DATE: 7/03/86

TOPIC	TIME
Study Skills	1 hour
Lesson 11	
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 4	
Main Idea	
Objective 7	
Author's viewpoint	
Writing	1 hour
Objective 1	
Spelling	
Objective 3	
Capitalization	
Objective 6	
Proofreading	
Mathematics	1 hour
Objective 2	
Probabilities	
Objective 4	
Decimals	
Testing	1 hour

DAILY LESSON PLAN

DATE: 7/07/86

TOPIC	TIME
Study Skills Lesson 12	1 hour
Instructional Time (Individual lessons as prescribed by diagnostic testing)	
Reading Objective 1 Word Meaning Objective 5 Fact and Opinion Objective 6 Cause and Effect	1 hour
Writing Objective 1 Spelling Objective 4 Correct Usage Objective 7 Descriptive Writing	1 hour
Mathematics Objective 5 Word Problems Objective 6 Word Problems	1 hour
Testing	1 hour

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 1	Word Skills SRA-Level 1 Word Skills SRA-Level 2 Word Herd--Sound Alikes Word Herd--Look Alikes Synonym Drill Vocabulary Flash Cards Word Wars Crossword Magic Word Attack Missing Links-Eng. Editor Missing Links-Young People Missing Links-Classics	
Reading 5	Diascriptive Reading II Critical Reading	
Reading 6	Diascriptive Reading II Critical Reading	

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 1	Word Wizards Spelling Volume 2 Word Wars Synonym Drill Vocabulary Flash Cards Miss Spelling Bee Crossword Magic Word Attack Junior High Language Arts	
Writing 4	Junior High Language Arts	
Writing 7	Writing a Character Sketch	

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 5	Computerized Math-Level 6 Computerized Math-Level 7 Multiplication Helper Addition Helper Arithmetic Word Problems Math Olympics Read/Solve Math Problems 1 Read/Solve Math Problems 2 Computer D/I SRA-Level D	
Math 6	Multiplication Helper Addition Helper Math Olympics Fraction Drill I Fraction Drill II Read/Solve Math Problems 1 Read/Solve Math Problems 2 Computer D/I SRA-Level D	

DAILY LESSON PLAN

DATE: 7/08/86

TOPIC	TIME
Study Skills Practice	1 hour
Instructional Time (Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 5	
Fact and Opinion	
Objective 6	
Cause and Effect	
Writing	1 hour
Objective 1	
Spelling	
Objective 4	
Correct Usage	
Objective 7	
Descriptive Writing	
Mathematics	1 hour
Objective 5	
Word Problems	
Objective 6	
Word Problems	
Testing	1 hour

DAILY LESSON PLAN

DATE: 7/09/86

TOPIC	TIME
Study Skills Practice	1 hour
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 5	
Fact and Opinion	
Objective 6	
Cause and Effect	
Writing	1 hour
Objective 1	
Spelling	
Objective 4	
Correct Usage	
Objective 7	
Descriptive Writing	
Mathematics	1 hour
Objective 5	
Word Problems	
Objective 6	
Word Problems	
Testing	1 hour

DAILY LESSON PLAN

DATE: 7/10/86

TOPIC	TIME
Study Skills Practice	1 hour
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 5	
Fact and Opinion	
Objective 6	
Cause and Effect	
Writing	1 hour
Objective 1	
Spelling	
Objective 4	
Correct Usage	
Objective 7	
Descriptive Writing	
Mathematics	1 hour
Objective 5	
Word Problems	
Objective 6	
Word Problems	
Testing	1 hour

DAILY LESSON PLAN

DATE: 7/11/86

TOPIC	TIME
Study Skills Practice	1 hour
Instructional Time (Individual lessons as prescribed by diagnostic testing)	
Reading Objective 1 Word Meaning Objective 5 Fact and Opinion Objective 6 Cause and Effect	1 hour
Writing Objective 1 Spelling Objective 4 Correct Usage Objective 7 Descriptive Writing	1 hour
Mathematics Objective 5 Word Problems Objective 6 Word Problems	1 hour
Testing	1 hour

WEEKLY LESSON PLAN

DATE: 7/14/86 - 7/18/86

TOPIC	TIME (PER DAY)
Study Skills Practice	1 hour
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 8	
Logical Conclusions	
Objective 9	
Generalization	
Writing	1 hour
Objective 1	
Spelling	
Objective 8	
How-to Composition	
Objective 9	
Ideas Classified	
Mathematics	1 hour
Objective 7	
Personal Finance	
Objective 8	
Areas	
Testing	1 hour

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 1	Word Skills SRA-Level 1 Word Skills SRA-Level 2 Word Herd--Sound Alikes Word Herd--Look Alikes Synonym Drill Vocabulary Flash Cards Word Wars Crossword Magic Word Attack Missing Links-Eng. Editor Missing Links-Young People Missing Links-Classics	
Reading 8	Diascriptive Reading II Critical Reading	
Reading 9		

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 1	Word Wizards Spelling Volume 2 Word Wars Synonym Drill Vocabulary Flash Cards Miss Spelling Bee Crossword Magic Word Attack Junior High Language Arts	
Writing 8		
Writing 9		

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 7	Computerized Math-Level 5 Estimation-MECC Multiplication Helper Addition Helper Making Change Read/Solve Math Problems 1 Read/Solve Math Problems 2 Computer D/I SRA-Level D	
Math 8	Computerized Math-Level 5 Computerized Math-Level 6 Computerized Math-Level 7 Elementary Volume 8 Elementary Volume 9 Elementary Volume 10 Mathematics Volume 3 Multiplication Helper Addition Helper Computer D/I SRA-Level D	

WEEKLY LESSON PLAN

DATE: 7/21/86 - 7/25/86

TOPIC	TIME (PER DAY)
Study Skills Practice	1 hour
Instructional Time	
(Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Objective 10	
Locate Information	
Skill Reinforcement as needed	
Writing	1 hour
Objective 1	
Spelling	
Objective 10	
Persuasive Writing	
Skill Reinforcement as needed	
Mathematics	1 hour
Objective 9	
Metric	
Objective 10	
Charts and Graphs	
Testing	1 hour

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 1	Word Skills SRA-Level 1 Word Skills SRA-Level 2 Word Herd--Sound Alikes Word Herd--Look Alikes Synonym Drill Vocabulary Flash Cards Word Wars Crossword Magic Word Attack Missing Links-Eng. Editor Missing Links-Young People Missing Links-Classics	
Reading 10		
As Needed		

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 1	Word Wizards Spelling Volume 2 Word Wars Synonym Drill Vocabulary Flash Cards Miss Spelling Bee Crossword Magic Word Attack Junior High Language Arts	
Writing 10		
As Needed		

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 9	Computerized Math-Level 7 Mathematics--Volume 2 Elementary Volume 1 Multiplication Helper Addition Helper Computer D/I SRA-Level D	
Math 10	Computer D/I SRA-Level D	

WEEKLY LESSON PLAN

DATE: 7/28/86 - 8/01/86

TOPIC	**TIME** **(PER DAY)**
Study Skills Practice	1 hour
Instructional Time (Individual lessons as prescribed by diagnostic testing)	
Reading	1 hour
Objective 1	
Word Meaning	
Skill Reinforcement as needed	
Writing	1 hour
Objective 1	
Spelling	
Objective 11	
Argument	
Skill Reinforcement as needed	
Mathematics	1 hour
Objective 11	
Formulas	
Skill Reinforcement as needed	
Testing	1 hour

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 1	Word Skills SRA-Level 1 Word Skills SRA-Level 2 Word Herd--Sound Alikes Word Herd--Look Alikes Synonym Drill Vocabulary Flash Cards Word Wars Crossword Magic Word Attack Missing Links-Eng. Editor Missing Links-Young People Missing Links-Classics	
Reading 11		

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 1	Word Wizards Spelling Volume 2 Word Wars Synonym Drill Vocabulary Flash Cards Miss Spelling Bee Crossword Magic Word Attack Junior High Language Arts	
Writing 11		

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 11	Elementary Volume 8 Elementary Volume 9 Elementary Volume 10 Mathematics Volume 3 Multiplication Helper Addition Helper Computer D/I SRA-Level D	
As Needed		

WEEKLY LESSON PLAN

DATE: 8/04/86 - 8/06/86

TOPIC	TIME (PER DAY)
Study Skills Practice	1 hour
Instructional Time (Individual lessons as prescribed by diagnostic testing)	
Reading Skill Reinforcement as needed	1 hour
Writing Skill Reinforcement as needed	1 hour
Mathematics Skill Reinforcement as needed	1 hour
Testing	1 hour

Study Skills
Lessons

I. Learning to Listen

1. Use NASSP Study Skills Program Unit 1, pgs. 4-6.

2. Have students practice listening in small groups or through team effort.

3. Show videotape or read article to students. Give them a quiz afterwards to check their listening skills retention. Then show or read it again with students knowing what they are listening for and see if they listen for the answers. Check to see how much better they do on the second test.

II. Learning to Listen

1. Use NASSP Study Skills Program Unit 1, pg. 7.

2. Play gossip.

3. Practice active listening skills by reading portion of an article or passage from a book and having several students tell what they picture.

III. Vocabulary - Getting Meaning from Context

1. Use Unit II NASSP book, pgs. 8-12.

2. Create an exercise with homonyms. Say a word and ask for its meaning.
Then read a sentence using the word in the context you had in mind.
Then talk about the difference in meaning if two meanings surfaced.
This should help reinforce the idea of lookig at the context.

   Ex. "too". Most students would give the defintion for "two". Sentence:
   I enjoyed the trip to Canada too.

IV. Vocabulary - Getting Meaning from Context

1. Use pgs. 13-17 from NASSP book.

2. Create a team game where the students can practice the skills covered in this section. Set up two teams (like in a spelling bee). Give the first person a sentence with a word used in context and give him/her three choices for the correct meaning. If he/she misses, go to the first person on the other team. If his/her answere is incorrect, give the correct response (which should be obvious). From there go on to another sentence and the next team member. Give a point for each correct answer and play to 21 points.

V. Solving Problems

Use pgs. 40-44, NASSP book. Work through this as a group.

VI. Solving Problems

1. Use pgs. 45-47, NASSP book.

2. Divide the class into small groups (3-4 in a group). Have each group decide on a real problem they are experiencing or have experienced that they want the group to solve. If no one has a problem, let them borrow a problem from a goup that has more than one problem. Have them outline the solution using the method described in Lesson 6. After a certain amount of time (10-15 minutes) have the group leader describe their problem and solution.

VII. How Do You Study?

1. Unit 7, pgs. 48-52 (stop at ex. 5, pg. 52)

2. If a short videotape is available on study skill, use it at the end of the lesson. Or, ask a guidance counselor or an honor student to come in and talk briefly (10-15 minutes) about good study skills.

VIII. Study Skills

1. Unit VIII, pgs. 52-54 (begin at ex. 5, pg 52).

2. Prepare a 15-20 minute lesson to present on the topic of "Learning Styles: Visual, Auditory, Kinesthetic." Explain the 3 basic learning styles that people use. Give examples and do an exercise teaching a kill using all three styles. After taking students through all three, have each student evaluate which is his/her prevalent learning styles.

   Ex. How to play dominoes. 1) Audiotape describing it. 2) Diagram showing it.
   3) Demonstration.

IX. Improving Memory

1. Unit VIII, NASSP, pgs. 55-61

2. Create some exercises using the methods described - grouping visualizing, link method.

X. Memory

1. Unit VIII, NASSP, pgs. 61-64 (begin with Repeating, pg. 61).

2. Create some exercises using methods covered - repeating, choosing to remember, mnemonics- acronyms and acrostics.

3. Give students a list of 20 things they have in their memories and have them analyze how they remember those facts.

   Ex. Family members or friend's birthdays; months of the year; phone numbers; state capitols; the lyrics of a song; a poem memorized for English class; dates in history; people's names when they first meet them; etc.

XI. Taking Tests

1. Unit X, NASSP, pgs. 73-78.

2. Give a short test that has many trick question and then go through the test and show why they might have answered certain questions incorrectly.

XII. Tests

1. Unit X, NASSP, pgs. 79-84.

2. Give students a short test that has questions like those that will be on the TEAMS test. Go over it together and discuss mistakes when they are made.

SCHEDULE C

- *LIST OF MATERIALS USED IN PROGRAM*
- *SOFTWARE CORRELATIONS AND EVALUATIONS BY INSTRUCTORS*

TEAMS SUMMER PROJECT
BOX LIST

Software

Package	**Publisher**
Word Wizards	**MECC**
Mathematics--Volume 2, Measurement	
Spelling--Volume 2, Secondary	
Writing a Character Sketch	
Writing a Narrative	
Estimation	
Word Herd--Sound Alikes	
Word Herd--Look Alikes	
Elementary Volume 1, Metric	
Elementary Volume 8, Geometry	
Elementary Volume 9	
Elementary Volume 10	
Mathematics Volume 3, Geometry	
Miss Spelling Bee	**Public Domain Software on File**
Word Problems	
Speed Reading	
Synonym Drill	
Word Wars	
Vocabulary Flash Cards	
Making Change	**Public Domain Software on File**
Math Olympics	
Fraction Drill I	
Fraction Drill II	
Addition Helper	
Multiplication Helper	
DOT Writer	**D.O.T.**
Tutorial	
Computer Drill and Instruction Level C	**SRA Math**
Computer Drill and Instruction Level D	
Estimation	
Problem Solving	
Read and Solve Math Problems I	**Educational Activities**
Read and Solve Math Problems II	
Diascriptive Reading II	
Improving Your Memory	**M C E**

Strategies for Test Taking
Effective Study Skills: A Learning Style Approach

Video Materials

Mastering Fractions Video Disk	**Systems Impact**
Counterplot Videotape Series tapes 3-9(pg.34) With Guide	**Agency for Instr. Technology**
Reading for a Reason--8 tapes	
GED Series	**Kentucky Educ. Television**
Mathematics	
Reading	
Grammer	
Another Page Series	

Print Materials

Reading with Reason-Level A	**Collamore Educ.**
Level B	
Level C	
Level D	
Level E	
Teacher's Manual	
Crossnumber Puzzles	**Creative Publ.**
Book 1	
Book 2	
Adventures with Arithmetic	
Fractions Bk.1	
Decimals Bk. 2	
Percent Bk. 3	
Mystery Story Problems	
Multiplication	
Division	
Multiplication & Division Problems	
Mixed Multiplication & Division Facts	
The Problem Pocket(Logic Word Problems)	
What Are My Chances, Book A	
Handy Math Series	
Following Directions	**J. Weston Walch**
Building Test-taking Skills in Math Gr. 7&8	**Judy/Instructo**
Building Test-taking Skills in L/Arts Gr. 7&8	**Judy/Instructo**

Test-taking Tips and Practice Upper Grades L/Arts & Reading	**Milliken**
Critical Reading, Gr. 4-9	**Instructor Curriculum Mat.**
Competency Skills Math Gr. 6-9	**McDonald Publ.**
Competency Skills Reading Gr. 6-9	
Problem Solving in Daily Living	
Mastering Word Problems Middle and Upper Grades	
Interpretive Reading Middle and Upper Grades	
Reading Comprehension Stranger than Fiction	
Basic Writing Skills, Book A	
Basic Writing Skills, Book B	
Basic Writing Skills, Book C	
Learning to Use Reference Material	**Hayes Publ.**
TEAMS Practice Booklet Grade 9 by Gayle Fuller	
How to Study by Dale McMasters	**ESP Inc.**
Cause and Effect Game	**Comprension Games**
Reading for Detail Game	
hm Study Skills Workshop Kit(II)	**National Assoc. of Secondary School Principals**
hm Study Skills Student Text(II)	
hm Math Study Skills Workshop Kit	
hm Math Study Skills Student Text	

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 1	Computerized Math-Level 7 Math Quiz: Percent/Decimal Computer D/I SRA-Level C Computer D/I SRA-Level D	
Math 2		
Math 3	Computerized Math-Level 5 Computerized Math-Level 6 Computerized Math-Level 7 Multiplication Helper Addition Helper Fraction Drill I Fraction Drill II Mastering Fractions V-Disk Computer D/I SRA-Level B Computer D/I SRA-Level C	

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 4	Computerized Math-Level 7 Estimation-MECC Multiplication Helper Addition Helper Math Olympics Computer D/I SRA-Level C	
Math 5	Computerized Math-Level 6 Computerized Math-Level 7 Multiplication Helper Addition Helper Arithmetic Word Problems Math Olympics Read/Solve Math Problems 1 Read/Solve Math Problems 2 Computer D/I SRA-Level D	
Math 6	Multiplication Helper Addition Helper Math Olympics Fraction Drill I Fraction Drill II Read/Solve Math Problems 1 Read/Solve Math Problems 2 Computer D/I SRA-Level D	

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 7	Computerized Math-Level 5 Estimation-MECC Multiplication Helper Addition Helper Making Change Read/Solve Math Problems 1 Read/Solve Math Problems 2 Computer D/I SRA-Level D	
Math 8	Computerized Math-Level 5 Computerized Math-Level 6 Computerized Math-Level 7 Elementary Volume 8 Elementary Volume 9 Elementary Volume 10 Mathematics Volume 3 Multiplication Helper Addition Helper Computer D/I SRA-Level D	
Math 9	Computerized Math-Level 7 Mathematics--Volume 2 Elementary Volume 1 Multiplication Helper Addition Helper Computer D/I SRA-Level D	

OBJECTIVE	PACKAGE(S)	COMMENTS
Math 10	Computer D/I SRA-Level D	
Math 11	Elementary Volume 8 Elementary Volume 9 Elementary Volume 10 Mathematics Volume 3 Multiplication Helper Addition Helper Computer D/I SRA-Level D	

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 1	Word Skills SRA-Level 1 Word Skills SRA-Level 2 Word Herd--Sound Alikes Word Herd--Look Alikes Synonym Drill Vocabulary Flash Cards Word Wars Crossword Magic Word Attack Missing Links-Eng. Editor Missing Links-Young People Missing Links-Classics	
Reading 2	Word Skills SRA-Level 1 Word Skills SRA-Level 2 Missing Links-Eng. Editor Missing Links-Young People Missing Links-Classics Critical Reading	
Reading 3	Missing Links-Eng. Editor Missing Links-Young People Missing Links-Classics Diascriptive Reading II	

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 4	Diascriptive Reading II	
Reading 5	Diascriptive Reading II Critical Reading	
Reading 6	Diascriptive Reading II Critical Reading	

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 7	Diascriptive Reading II Critical Reading	
Reading 8	Diascriptive Reading II Critical Reading	
Reading 9		

OBJECTIVE	PACKAGE(S)	COMMENTS
Reading 10		
Reading 11		

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 1	Word Wizards Spelling Volume 2 Word Wars Synonym Drill Vocabulary Flash Cards Miss Spelling Bee Crossword Magic Word Attack Junior High Language Arts	
Writing 2	Word Skills SRA-Level 1 Word Skills SRA-Level 2 Junior High Language Arts	
Writing 3	Junior High Language Arts	

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 4	Junior High Language Arts	
Writing 5	Junior High Language Arts	
Writing 6	Junior High Language Arts	

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 7	Writing a Character Sketch	
Writing 8		
Writing 9		

OBJECTIVE	PACKAGE(S)	COMMENTS
Writing 10		
Writing 11		

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Beatrice Franklin* SITE *Cullen Middle*

PROGRAM NAME (LEVEL) *hM Math Study Skills*

SPECIAL PREREQUISITE SKILLS: *(1) Know how to listen; (2) why note taking is important; (3) working materials*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *(1) The program tells the students what and how to study; (2) problem-solving ability; (3) applying math to daily situations; (4) reading, interpreting, and constructing tables, charts, and graphs.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *None*

DESCRIBE HOW THIS PROGRAM WAS USED: *(1) To teach study skills; (2) preparing for a test; (3) taking a math test; (4) how to learn from homework.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *9* Please justify your rating. *(1) Excellent presentation, (2) format.*

Use the back of this page for additional comments.

97

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Beatrice Franklin* SITE *Cullen Middle School*

PROGRAM NAME (LEVEL) *Readers Digest Math Level 6*

SPECIAL PREREQUISITE SKILLS: *(1) Problem -solving ability; (2) ability to read for details; (3) know four fundamentals of arithmetic.*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *The software is an excellent measure for determining strength and weakness of the students.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *(1) Too long for the caliber of students we have in the summer program. (2) An individual cannot stop working on a given day, and start where they left off.*

DESCRIBE HOW THIS PROGRAM WAS USED: *As an indicator to get a feel of working ability and knowledge of students.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *8* Please justify your rating. *(1) Adequate number of problems for grades 9-12; (2) good variety of problems; (3) multiple levels.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Beatrice Franklin* SITE *Cullen Middle*

PROGRAM NAME (LEVEL) *Readers Digest Math Level 7*

SPECIAL PREREQUISITE SKILLS: *(1) Problem-solving skills; (2) ability to content read-- detail; (3) know math (four fundamental operations)*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *The range and variety of problems in the program are excellent.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *(1) Too many problems for the grade level of summer students we have; (2) one cannot stop the program and start the next day where one leaves off.*

DESCRIBE HOW THIS PROGRAM WAS USED: *As an indicator to get a feel of the working ability and knowledge of students.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *8* Please justify your rating. *(1) Adequate for average students and grades 9-12 ; (2) good variety of problems; (3) multiple levels enabling the teacher to average the best score if necessary.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Beatrice Franklin* SITE *Cullen Middle*

PROGRAM NAME (LEVEL) *Readers Digest Math Level 5*

SPECIAL PREREQUISITE SKILLS: *(1) Have problem-solving ability; (2) ability to read for details; (3) know the four fundamentals of math.*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *The range and variety of problems in the program are excellent. The software measures the retention level of subject content.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *Can't stop the program; (2) too many problems for the grade level of summer student.*

DESCRIBE HOW THIS PROGRAM WAS USED: *As an indicator to get a feel of the working ability and knowledge of student.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *8* Please justify your rating. *(1) Adequate for average students (9-12 grade); adequate number and variety of problems; (3) multiple levels.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Denise Jackson* SITE *Cullen Middle*

PROGRAM NAME (LEVEL) *Crossword Magic*

SPECIAL PREREQUISITE SKILLS: *Language skills; some typing; some resource skills.*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *The software reinforces vocabulary, spelling, and resource skills. The puzzle format is an interesting way to test student's skills in a subject area.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *None*

DESCRIBE HOW THIS PROGRAM WAS USED: *Students were allowed to work on printed puzzles. The puzzles covered the ninth grade TEAMS vocabulary words.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *9* Please justify your rating. *The software covers a composite of language arts skills. It also helps students strengthen their problem-solving skills.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Denise Johnson* SITE *Cullen Middle*

PROGRAM NAME (LEVEL) *Missing Links*

SPECIAL PREREQUISITE SKILLS: *Students must have a working knowledge of--*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *It forces students to use their knowledge of spelling, grammar, mechanics, and sentence structure to solve a linguistic puzzle.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *It would be beneficial to the teacher if the program provided a management system that was maintained on the disk rather than on paper.*

DESCRIBE HOW THIS PROGRAM WAS USED: *Students often worked in pairs to solve a linguistic puzzle. After the package was introduced to the group, they used it on a regular basis.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *9* Please justify your rating. *The program reviews students in English grammar without their knowing it! Since the students are motivated by trying to make a high score, they continue to work with the package until they have completed one project. This is the kind of brainteaser that even ESL students can enjoy.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Denise Jackson* SITE *Cullen Middle*

PROGRAM NAME (LEVEL) *Josten's Language Arts*

SPECIAL PREREQUISITE SKILLS: *Students must have a working knowledge of standard English grammar.*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *The package provides excellent tutorials in sentence structure, mechanics, capitalization, and word analysis.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *The program holds only 120 students per disk, so it would not be practical for classroom use. No backup disks are provided, and the disk is protected. If the master disk were damaged, lessons would have to be interrupted while a replacement disk was ordered.*

DESCRIBE HOW THIS PROGRAM WAS USED: *The students were allowed to move through the learning material at their own pace. All students began with disk A. Some of them completed all eight disks; others did not.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *9* Please justify your rating. *The program provides a series of excellent tutorials for those aspects of grammar that students find most troublesome. Each disk covers the material in a fraction of the time it would take a classroom teacher to review the same information. Students also receive good, concise explanations of each lesson. In addition, the quizzes are not long and drawn out, and they effectively cover the items reviewed.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Jamesetta Seals* SITE *Hamilton Middle*

PROGRAM NAME (LEVEL) *Junior High Language Arts (Josten's)*

SPECIAL PREREQUISITE SKILLS: *None*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *The management system contents--the pre-test, the lessons, the progress checks, and the post-test are all written on the disk for the teacher. Students are assigned lessons based on their performance on the tests.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *None*

DESCRIBE HOW THIS PROGRAM WAS USED: *This program was used as a tutorial and reinforcement tool after the concept had been introduced in a small group session.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *8-9* Please justify your rating. *The students did not enjoy this package as much as some of the other, but the content was excellent.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Terry Myers* SITE *Hamilton Middle*

PROGRAM NAME (LEVEL) *SRA Math (Unmanaged)*

SPECIAL PREREQUISITE SKILLS: None

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *The material is graduated by difficulty. It offers on-line tutorials and a renaming option is available.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *The tutorials in each lesson are not varied in their explanations, and the program does not have visual or audible indicators for the number of times the tutorial was used by the student.*

DESCRIBE HOW THIS PROGRAM WAS USED: *A diagnostic test was given to the student, then SRA lessons were selected to help the student develop expertise in the identified areas.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *8.5* Please justify your rating. *The rating could be a ten if the tutorials were more in depth and more varied.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Terry Myers* SITE *Hamilton Middle*

PROGRAM NAME (LEVEL) *Adventures with Arithmetic*

SPECIAL PREREQUISITE SKILLS: *None*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *Each lesson addresses only one arithmetic subject or concept at a time. It adds color and interest to traditional drill and practice.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *The number of books in the series is rather large.*

DESCRIBE HOW THIS PROGRAM WAS USED: *The material was used to reinforce the skills learned in a different setting.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *10* Please justify your rating. *It is clear, reproducible, and enjoyable. The students actually asked for more work from the books.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Jamesetta Seals* SITE *Hamilton Middle*

PROGRAM NAME (LEVEL) *Diascriptive Reading*

SPECIAL PREREQUISITE SKILLS: *None*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *This program has a very good diagnostic program and management system. The accompanying diskettes used for remediation address the weaknesses identified in the diagnostic test.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *All of the TEAMS objectives were not identified in this program.*

DESCRIBE HOW THIS PROGRAM WAS USED: *This program was used to identify the student's weaknesses in language arts.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *9* Please justify your rating ____________________

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Jamesetta Seals* SITE *Hamilton Middle*

PROGRAM NAME (LEVEL) *Comprehension Games Kit: Reading for Detail and Cause and Effect*

SPECIAL PREREQUISITE SKILLS: *None*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *The greatest strength of the game kit is the interest level it has for the students. It was, however, the oral reading of the game cards that was most beneficial to our students of which some had limited-English-speaking backgrounds.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *None*

DESCRIBE HOW THIS PROGRAM WAS USED: *The games were used as reinforcement after the concept was introduced. They also were used as warm-up and wrap-up activities.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *10* Please justify your rating ______________________________

____

____

____

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Charles Robinson* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *Comprehension Power (Milliken)--Level HI-A*

SPECIAL PREREQUISITE SKILLS: *Very little in the way of keyboarding skills or special computer knowledge.*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *(1) Uses excerpts from high-interest reading selections such as "The Monkey's Paw" -- W. W. Jacobs; (2) allows students to adjust their reading speed from 80-650 w.p.m.; (3) covers a wide range of reading skills (details, main idea, drawing conclusions, sequencing, etc.) and tells students how they did in each area.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *(1) (On most skills) only gives student one question from each reading skill per selection. (2) Thus, you cannot use management system to concentrate on any one skill area. (3) The teacher must set up the class roster in the management system ahead of time (a weakness of all Milliken software).*

DESCRIBE HOW THIS PROGRAM WAS USED: *to prepare students for the reading section of the TEAMS test.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *8* Please justify your rating. *I love the feature of this program that allows you to adjust reading speed--this is a great example of how the microcomptuer facilitates individualization within a CAI environment. It reminds me of the old speed-reading machines in the sixties, except now the teacher has one for every student in the group.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Stephen Eisenberg* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *SRA--Estimation*

SPECIAL PREREQUISITE SKILLS:

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *Good practice on rounding whole numbers and decimals to different place values. An especially nice feature is a competitive program for two students to stimulate practice.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *Usual weakness of drill material.*

DESCRIBE HOW THIS PROGRAM WAS USED: *Practice rounding off, estimation, and building speed skills.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *7-8* Please justify your rating.

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Stephen Eisenberg* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *Read and Solve Math Problems I*

SPECIAL PREREQUISITE SKILLS: ______________________

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *Step-by-step instruction on solving one-step math problems. Useful for minority of students but requires much time by instructor to get student moving in program.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *Very tedious and slow. Boring to most students.*

DESCRIBE HOW THIS PROGRAM WAS USED: *Practice and remediation on problem solving.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *5-6* Please justify your rating. ______________________

Use the back of this page for additional comments.

111

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Stephen Eisenberg* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *GED Math Tapes and Workbook*

SPECIAL PREREQUISITE SKILLS: ____________________

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *Covers most of the teams topics. The tape on percents is good. Workbook good.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *Presentation is very superficial. Cannot be used by itself. For maximum effectiveness, teacher must stop tape often and ask questions and illuminate points. Older married couple difficult for eighth graders to relate to.*

DESCRIBE HOW THIS PROGRAM WAS USED: *Used to begin units where applicable.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *6* Please justify your rating. *See above*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Stephen Eisenberg* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *SRA Math Software -- A, B, C, D*

SPECIAL PREREQUISITE SKILLS: ______________________________

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *Good and useful drill material. Progresses from simple to more advanced systematically. Easy for students to use.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *Typical of "dry" drill material. Similar to what is available in most workbooks--nothing particularly unique. The tutorials are not particularly good--more difficult material requires help on teacher's part. Some of the mathematical calculations get "messy."*

DESCRIBE HOW THIS PROGRAM WAS USED: *Used to drill students on topics at their own pace. Different students could be doing different topics at same time.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *8.5* Please justify your rating. *Within limits of drill material, it is a good drill.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Charles Robinson* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *Elementary Language Arts: Sentence Structure (Josten Learning Systems)*

SPECIAL PREREQUISITE SKILLS: *A good, independent fifth grade reading level but no great computer skills*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *(1) Management system allows students to enter themselves into data base. (2) A variety of instruction is presented. Students type whole sentences, fill in blanks, complete charts, write phrases, and do multiple-choice exercises. (3) Really does a good job of teaching a concept, not just drilling something over and over.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *The management system's big flaw is its inability to send the program to a chosen level, as Milliken programs allow you to do, when making assignments or using the "drill" feature.*

DESCRIBE HOW THIS PROGRAM WAS USED: *to individualize grammar instruction in preparation for TEAMS test (one student tested out of all levels on the pre-tests, while other students spent 1-1/2 hours on a single level).*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *9* Please justify your rating. *A highly comprehensive language (grammar) tutorial that, during the course of eight diskettes, covers just about every detailed aspect of English-language sentence structure that this ex-English teacher could think of including.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Charles Robinson* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *Word Wizards*

SPECIAL PREREQUISITE SKILLS: *Simple ability to read and follow directions*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *(1) Has fairly nice hi-resolution graphics and sound for reinforcement; (2) has a variety of activities (four different ones); (3) allows teacher (or student) to enter his/her own word list(s); (4) documentation includes worksheets for related, off-the-computer work.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *(1) Management system is based on a compiler which must be used for any type of data entry--you can't even copy a data disk of words without using it. (2) You can't use the same word lists with Wizard memory that you've saved for use with three of the games. You have to configure a special word list. (3) Activities not that instructionally sound. For the most part, these are just fancy hangman games that drill and ask for repetition, but don't really teach.*

DESCRIBE HOW THIS PROGRAM WAS USED: *to reinforce spelling of TEAMS word list.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *6* Please justify your rating. *Not a bad package for spelling and/or vocabulary drill, but it doesn't really "teach" anything, and the management system is rather cumbersome.*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Charles Robinson* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *SRA Diascriptive Reading Series (Levels 3-8)*

SPECIAL PREREQUISITE SKILLS: *None*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *(1) Includes a diagnostic test for placing student at appropriate level; (2) covers a wide range of reading skills on the different disks (Fact/Opinion, Details, Inferences, etc.); (3) large print on screen is easy to read; (4) ESC option allows student to go back and reread the test that the question covers; (5) management system's DUMP command makes it easy to print out whole-class scores.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *(1) Students can't use program unless they've been assigned work; (2) management system is fairly tedious to use and lacks a drill feature for whole-class assignment; (3) biggest weakness is the limited amount of material on a disk--a very average reader can whip through one of these disks in its entirety in 20-35 minutes, making the management system a folly.*

DESCRIBE HOW THIS PROGRAM WAS USED: *To cover TEAMS reading objectives for small tutorial group in summer project.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *6* Please justify your rating. *Does a good job of covering TEAMS reading objectives but has such a limited amount of instructional data on a disk that a class could go through a whole set of the skills disks in just a few class periods (reading selections are short in length and few in number on each disk).*

Use the back of this page for additional comments.

TEAMS SUMMER PROJECT

SOFTWARE EVALUATION FORM

TEACHER *Charles Robinson* SITE *Deady Middle School*

PROGRAM NAME (LEVEL) *Word Attack!*

SPECIAL PREREQUISITE SKILLS: *Students need to understand concept of what a data disk is.*

DESCRIBE THE MAJOR STRENGTHS OF THE PROGRAM: *(1) Presents vocabulary words in an exciting format with much variety (tests, fill-in blanks, and video game); (2) allows you to work with many word lists at different difficulty levels.*

DESCRIBE ANY WEAKNESSES OF THE PROGRAM: *(1) Pascal-based editor makes creating customized word lists a nearly impossible chore. (2) It's a shame you can't adjust the number of words you want to work with at a time from the data disk. It limits the program's flexibility in fitting into different time slot lengths. (3) The way the word lists are presented for viewing is very dry and doesn't hold the attention of the students. (4) Being a drill-and-practice program, it doesn't really teach concepts.*

DESCRIBE HOW THIS PROGRAM WAS USED: *to introduce and drill over vocabulary words in preparation for TEAMS test.*

AFTER COMPLETING YOUR REVIEW OF THE SOFTWARE, GIVE IT AN OVERALL RATING USING THE KEY BELOW. (This section should be completed after the attached pages.)

RATING

10	Could not be better
8-9	Excellent (highly applicable)
6-7	Recommended with reservation
4-5	Not recommended
1-3	Poor

YOUR RATING *9* Please justify your rating. *Students love this program. They think they're playing a game--and they are, but in the process, they also are learning something.*

Use the back of this page for additional comments.

SCHEDULE D

STUDENT AND TEACHER COMMENTS

TEAMS SUMMER PROJECT
SUMMARY REPORT

DEADY SITE

Charles Robinson and Stephen Eisenberg, Instructors

When a group of about 12 students entered my computer room on June 19, 1986, ready to begin the summer TEAMS project with me and my teaching partner, Mr. Eisenberg, I suddenly felt my anxiety being replaced by excitement and anticipation. The difficult classroom full of underachievers I had anticipated was, instead, going to be a group of basically cooperative, motivated youngsters who were willing to work hard to raise their academic achievement levels. I knew this because almost every one of them had been in my seventh-grade computer literacy classes during the 1984-1985 school year. While the work habits of the students had no doubt changed in the time since I had worked with them, I still felt like I was having a reunion with old friends.

By the fourth day of the course (following a little telephone recruiting and word-of-mouth advertising), our enrollment was up to 19 and our program was in full swing. When we consulted with Mr. Chenail, a Deady counselor, we confirmed what we had already suspected about these students: many of them had ESL backgrounds and, thus, an overall history of relatively low achievement test scores. Some of these kids who were obviously bright, Mr. Chenail explained, had not scored up to their potential, because they had not fully grasped the language skills necessary to do well on the tests. A program like this was perfect for them.

Mr. Eisenberg began his part of the program by administering a "homemade" pretest which covered all of the TEAMS math objectives. In looking at the results, he saw two fairly clear-cut groups of students emerge: those who had a good grasp of basic intermediate math skills and those who were in immediate need of remedial practice.

I found, in working the students through the SRA Diascriptive Reading diagnostic tests, a very strong similarity between the language test scores and Mr. Eisenberg's math scores. A two-tiered structuring of the class obviously would be the best method of presenting heterogeneous instruction. Thus, two almost stereotypical groups emerged: a "low" group and a "high" group.

By the third week of the course, our enrollment had stabilized at seven students in the high group and six in the low group. Over the next five weeks, an interesting set of group dynamics developed. The more accelerated group became quite cohesive for middle school children, engaging in peer tutoring and competition to see who would make the highest grades, grasp new concepts with the most ease, etc. During the entire summer, these children did not compile more than a small number of absences among them. In fact, four of the seven had perfect attendance for the whole session. Mr. Eisenberg and I found it a joy to work with these young people. He was able to teach them algebra (and even a little trigonometry to one student), while I had the first real chance in my English teaching career to work through the writing process with students in the manner advocated by people like Tom Liner and James Kinneavy. Watching a few of the students spend five consecutive hours working on a narrative composition practically brought tears to my eyes. Things like that just do not occur in an everyday school setting.

The other group of students stood in sharp contrast to the faster group. While the accelerated group would come running excitedly into the room at 7:30 sharp each day, many of the students in the slower group were chronically tardy and/or absent. The ones who did come regularly would frequently "goof off" when they did not have an instructor directly looking over their shoulders. After much observation and discussion with these students, Mr. Eisenberg and I became convinced that the primary reason several of them were coming to the class was because their parents viewed it as a free babysitting service HISD was offering. While the higher group completed 90 percent of their homework assignments, the youngsters in the other group almost never did their homework.

Our frustrations reached their acme during the days we administered the CTBS. On the one hand, a few students took the whole process seriously, budgeting their time in carefully completing the test. At the same time, however, several others zipped through the bubbling of their answer sheets with little concern for the quality of their output. Some of this careless work may have been associated with the shortcomings of the test itself. Much of the CTBS covered material unrelated to the TEAMS objectives, as we have detailed in an attachment to our test log. Additionally, the "A-H" multiple-choice structure of the CTBS was unlike anything these students have been exposed to in the past.

Overall, however, we would have to characterize this program at Deady as successful. The small class sizes may not have made the project very cost effective, but they did enable Mr. Eisenberg and me to engage in some intensive math and language tutoring with these children that we feel they may well remember for the rest of their lives. Even the students who did not work very hard certainly got more out of their summer than they would have by staying home and watching television. For most of the kids, though, it was a very fruitful experience that should help them become better students in high school.

TEAMS SUMMER PROJECT
SUMMARY REPORT

CULLEN SITE

Mrs. Denise Jackson, Instructor

The TEAMS Summer Project allowed me to work in the ideal teaching situation. The classroom was equipped with twenty computers and three printers. My team teacher, Beatrice Franklin, and I worked with as many as fifteen, and as few as five students, throughout the summer.

Many of the students came into the program with low language skills, and they were especially weak in writing. After having assessed the students' strengths and weaknesses, I assigned them to work with certain pieces of courseware. As the weeks passed, I noticed that all of the students had shown great improvement in grammar, and they no longer were hesitant about writing. One student never wanted to write. But, after three weeks into the program, he sat down with the word processor and wrote a three-paragraph letter with ease and confidence.

One of the writing assignments was a real challenge. The students were asssigned to play the computer simulation *Oregon Trail*. Before playing the game, however, they had to gather research about that era in American history. They spent three hours in their school library. The next day, they played the simulation and wrote a diary based on the happenings. All of them had difficulty getting started, and they did not know what to do, since this kind of assignment was new to them. I wrote a sample diary, showing them how they should weave their research into their writing. After having read my sample, one young lady spent three hours at the computer perfecting her diary. She told me that she was trying to make her diary as long as mine.

All of the students have improved their skills in English and should experience a little more success in that discipline once school resumes. On the last day of the program, I asked them to record their feelings about the TEAMS Summer Project. Below are some of their comments:

> *"The Summer TEAMS Program was fun and helpful to me. I really enjoyed coming. It was the best."*
>
> Shanda Washington

"In English I feel like noun is my first name, verb is my middle name, and adjective is my last name--meaning I enjoyed it (English) even more than I used to."

Dianne Taylor

"The two nicest teachers in the world for the Summer TEAMS Program are Mrs. Jackson and Ms. Franklin. They really were on the ball about helping us learn what this program was about....At the end of the program we had a test, and it was easy..."

Leara Brown

"I enjoyed the program a lot. It helped me learn what I needed to practice on....I improved a lot since I came to this program."

Hai Minh Quach

While I was here at the program, I was comfortable with the material and the teachers. When I first started, I had no idea that it would have been this great. I really enjoyed this program and am glad I started."

Catina Felder

Our Vietnamese student used Vocabulary Flashcards to make up his own dictionary, which he worked on daily. After he was introduced to Crossword Magic, he began to make puzzles in his own language that he passed out to neighborhood kids. A few days later, several Vietnamese students visited our lab, and they all made crossword puzzles in their own language that they passed out to each other.

I shared Josten's Elementary Language Arts with an eighth-grade teacher. Several days later, she came back raving about the quality of the software and asked to borrow the Diascriptive Reading series.

TEAMS SUMMER PROJECT
SUMMARY REPORT

CULLEN SITE

Mrs. Beatrice Franklin, Instructor

The purpose of the TEAMS PROJECT was to address the proficiencies on which students scored low during their regular school session and to help them raise their TEAMS scores.

The math component specified these objectives:

1. Identification of relationships among decimals, fractions, and percent
2. Fractions (addition, subtraction, multiplication, and division)
3. Word problems (two-or-three step)
4. Word problems (ratios, proportions, and percents)
5. Personal finance problems
6. Areas of triangles, rectangles, etc.
7. Word problems (metric measurement)
8. Using information charts to solve word problems
9. Using formulas to solve problems

The fraction components were simply great, and the graphics were good. The section of geometry was very simple, yet to the point. My favorites were the graphs, interest problems, formulas, and probability. Mrs. Denise Jackson, the English teacher, was very impressed when she previewed the word problems, especially the two-and three-step problems.

When the students first arrived, I emphasized the objectives of the program. The study component consisted of small groups with discussions on how to study. I stressed the importance of reading for details and facts, studying for a specified amount of time, and studying in a nice, quiet place.

I tested the students during that first week, using *Computerized Mathematics* by Reader's Digest, which consisted of three levels. Level 7 contained 184 problems; level 6, 84 problems; and level 5, 80 problems. The majority of the students scored well. The scores ranged from 60 percent to 90 percent.

When the student worked at the computer, it was beautiful. I remember one student stated, "I only want purple handouts, please." And I replied, "Young lady, work with the computer today, and see how you like it." After that day, she worked at the computer every day.

Student comments are below:

> *"The TEAMS PROJECT was a very useful program for the teenager who is below grade level and needs additional preparaton to pass the ninth grade TEAMS test."*
>
> *"While I was here with the program, I was comfortable with the materials and the teachers. When I first started, I had no idea that it would have been this great."*
>
> *"At the end of the program, we learned a lot about computers. It was really fun coming here. I hope they have another TEAMS summer program again next year."*
>
> *I learned a lot, thanks to the school."*

I liked the way Mrs. Irby coordinated the program, the materials, and the Thursday evening meetings during which we coordinated the week's work and shared ideas.

I especially enjoyed the last day, the awarding of T-shirts and trophies and the taking of pictures by Mrs. Irby and the photographer.

TEAMS SUMMER PROJECT
SUMMARY REPORT

HAMILTON SITE

Terry Myers and Jamesetta Seals, Instructors

The TEAMS Summer Project was an excellent program designed to prepare students for the TEAMS Test to be given during the next school year. The Hamilton staff and administration offered support and assistance during the entire program. The support staff at the Department of Technology provided the necessary materials and equipment needed to successfully accomplish the objectives that were set up in this program.

The advantages of this program were:

- **Diagnosis**--Through several diagnostic packages, the students' weaknesses were immediately identified and accompanying materials aided in remediation. Math area used "computerized math" as a diagnosis instrument and "computerized math" was used to periodically check student progress.

- **Excellent student/teacher relationship**--With the small groups at tables, rather than in the traditional formal classroom setting (teacher behind big desk or with back to students at blackboard), students appeared to feel less inhibited about asking questions and expressing their opinions. With this setup, more opportunities for assistance with oral reading and comprehension were available in both English and math. Furthermore, this intimate interaction enabled teachers to watch facial expressions, detecting furrowed brows or other nonverbal responses and to regress as much as possible to fill in education gaps in that subject area. Each student's self-esteem was enhanced by sharing the vocabulary of his native language with the teachers. In addition, teachers counseled the students when the topic of drugs arose.

- **Team teaching**--By working together in the same room, students observed the relationship in the two content areas, such as reasoning in math and drawing logical conclusions in language arts. The teachers also detected and assisted students with the same type of problems in both subject areas.

- A teacher observer from the University of Houston joined the teachers during the second week. She noted that she received a wealth of experience, and she enjoyed learning diagnostic/remediation procedures in math and language arts.

- **Wide varity of materials**--With the conference period, the teachers utilized and coordinated the numerous workbooks, computer programs, videotapes, laser disks, and games to develop an interesting and motivational assortment of activities for the students. Some of the language arts materials were shared with another English teacher. The time that we had before school opened to preview the material was invaluable in becoming familiar with them.

OUTSTANDING MATERIALS

Language Arts

- Language Arts Comprehension Games:
  "Reading for Details" and "Cause and Effect"
- Word Attack (vocabulary)
- Videotapes "Another Page"
  (Students really enjoyed the "soap opera" format.)
- Test-taking workbooks
- The Missing Link (context clues)

Math

- S.R.A. "C" and "D"
- Adventures in Arithmetic (Percent, Fractions, and Decimals)
- Diagnostic Computerized Math (Reader's Digest)
- G.E.D. Mathematics

The major problem during the program was that of language (limited-English speaking). One solution was oral reading (both role playing by the teacher reading and by the student reading). The comprehension games were excellent for these students, because they had to read the game cards and answer the questions to win. (There was one student who had such a severe language problem that he would cheat to avoid landing on the space where he had to read.)

Overall, the summer program provided a rewarding opportunity for both the students and teachers to zero in on the subject matter and techniques necessary to master the TEAMS test.

SCHEDULE E

TEAMS STATUS REPORTS

TEAMS SUMMER PROJECT
FIRST DAY REPORT
6/19/86

CULLEN MIDDLE SCHOOL

Status: 10 students currently enrolled.
Teachers and students working on raising enrollment.
Comments: Smooth start--Students and teachers enthusiastic.
Cullen is still admitting students to general summer school--decision has not been made yet on permanent site location.

DEADY MIDDLE SCHOOL

Status: 14 students currently enrolled.
Teachers and students working on raising enrollment.
Comments: Smooth start -- Students and teachers enthusiastic.

HAMILTON MIDDLE SCHOOL

Status: 3 students currently enrolled.
Teachers and students working on raising enrollment.
Counselors at Hogg Middle were contacted through Program Administrator. They are going to work on enrollment.
They were enthusiastic about program helping their students (especially ESL).
Comments: Smooth start -- Students and teachers enthusiastic.

GENERAL SUGGESTIONS FOR PROJECT:

Add peer tutoring to implementation strategies.

PROJECT STATUS REPORT
TEAMS SUMMER PROJECT
6/20/86

CULLEN MIDDLE SCHOOL

Status: 10 students currently enrolled (as of 6/19/86).
Teachers and students working on raising enrollment.
Comments: Smooth start -- Students and teachers enthusiastic.
Cullen is still admitting students to general summer school--decision has not been made yet on permanent site location.

DEADY MIDDLE SCHOOL

Status: 14 students currently enrolled (as of 6/19/86).
Teachers and students working on raising enrollment.
Comments: Smooth start--Students and teachers enthusiastic.

HAMILTON MIDDLE SCHOOL

Status: 5 students currently enrolled (as of 6/20/86).
Teachers and students working on raising enrollment.
Counselors at Hogg Middle were contacted through Program Administrator. They are going to work on enrollment.
They were enthusiastic about program helping their students (especially ESL).
Comments: Smooth start--Students and teachers enthusiastic. Students are exhibiting extremely low-level language skills (many are ESL), but they are eager to learn.
Note: Jamesetta Seals will be absent next Monday and Tuesday due to previous commitments. It was decided not to seek a substitute at this time due to small class size. Terry Myers will supervise all students and make assignments based on lesson plans left by Jamesetta.

GENERAL SUGGESTIONS FOR PROJECT:

Add peer tutoring to implementation strategies.
Avoid using substitutes where possible. Small class size will make this possible.
Include some lower level materials for ESL students. (Hamilton especially has this need.)
Some additional software from SRA was suggested by Terry Myers. This is licensed material so we will duplicate and deliver next week.
Try to get publicity for program. (Contacted John Moore for press release.)

CONTACTS MADE:

Jean Ely--Research Dept.
Counselors--Cullen, Deady, Hamilton, Hogg
Site administrators--Cullen, Deady, Hamilton, Worthing
Vendors--Cole Supply

PROJECT STATUS REPORT
TEAMS SUMMER PROJECT
Submitted by: Sherry Irby
6/27/86

CULLEN MIDDLE SCHOOL

Status: 12 students currently enrolled (as of 6/20/86).
Teachers and students working on raising enrollment. Enrollment to be cut off on Friday, June 27, for evaluation purposes.
Comments: Cullen will be the permanent site for summer school.

DEADY MIDDLE SCHOOL

Status: 19 students currently enrolled (as of 6/20/86).
Teachers and students working on raising enrollment. Enrollment to be cut off on Friday, June 27, for evaluation purposes.
Comments: Special needs--Some students will need pre-algebra work in mathematics. Software provided by Program Administrator.

HAMILTON MIDDLE SCHOOL

Status: 10 students currently enrolled (as of 6/25/86).
Teachers and students working on raising enrollment. Enrollment to be cut off on Friday, June 27, for evaluation purposes.
Counselors at Hogg Middle were contacted through Program Administrator. They are going to work on enrollment.
They were enthusiastic about program helping their students (especially ESL).
Comments: Special needs--Students are exhibiting extremely low-level language skills (many are ESL), but they are eager to learn. Lower level mathematics software was provided by Program Administrator.

GENERAL SUGGESTIONS FOR PROJECT:

Time sheets will be turned in to Aileen Arnett on Mondays by Sherry Irby. Decision was made to limit teachers to seven hours unless previously authorized through Sherry Irby. However, first week and second week's time sheets will be left as is, because the teachers have not yet been informed.

CONTACTS MADE:

Tonya--Research Department
Site administrators--Cullen, Deady, Hamilton
Vendors--Cole Supply, Josten, Mindscape, Sunburst, Collamore, Educ. Act., Scholastic, A.I.T., NASSP, Gamco, Regency

PROJECT STATUS REPORT
TEAMS SUMMER PROJECT
Submitted by: Sherry Irby
7/03/86

CULLEN MIDDLE SCHOOL

Status: 12 students currently enrolled (as of 6/30/86).
Teachers and students working on diagnosed problem areas and study skills.

DEADY MIDDLE SCHOOL

Status: 16 students currently enrolled (as of 6/30/86).
Teachers and students working on diagnosed problem areas and study skills.

HAMILTON MIDDLE SCHOOL

Status: 8 students currently enrolled (as of 6/30/86).
Teachers and students working on diagnosed problem areas and study skills.

GENERAL SUGGESTIONS FOR PROJECT:

Faculty meetings will be held at DOT on Thursdays at 1:00 pm. Lesson plans will be submitted to Project Administrator for evaluation purposes at that time. There will be group discussions of project status and progress. Sharing of teaching strategies and problems are beneficial to all involved.

CONTACTS MADE:

Robert Guercio--Research Department
Site administrators--Cullen, Deady, Hamilton

PROJECT STATUS REPORT
TEAMS SUMMER PROJECT
Submitted by: Sherry Irby
7/18/86

CULLEN MIDDLE SCHOOL

Status: 12 students currently enrolled.
Teachers and students working on diagnosed problem areas and study skills.
Comments: Field trips to local libraries were undertaken and writing projects are underway. Students are responding well to technology-oriented lesson presentation, and teachers report good progress on all levels. Students are enthusiastic about their work, and improvements are seen daily.

DEADY MIDDLE SCHOOL

Status: 12 students attending on regular basis.
Teachers and students working on diagnosed problem areas and study skills.
Comments: Students have been divided into two working groups on the basis of skill levels. Higher group is working very rapidly. Steve reports that several students have completed all ninth grade TEAMS objectives and are currently working on Algebra and Trigonometry. Lower group is showing good progress (e.g., one student has mastered all levels of fractions). This is great individual improvement.

HAMILTON MIDDLE SCHOOL

Status: 4 students attending on regular basis.
Teachers and students working on diagnosed problem areas and study skills.
Comments: Students are getting high level of individualization. Attitudes of students are very positive; their extraordinarily high attendance in the program is a good indication of this. Rapport between students and teachers is very good. This is helping teachers understand and meet individual needs and encourage growth. Teachers report good progress on the part of all students.

GENERAL SUGGESTIONS FOR PROJECT:

Evaluation--Robert Guercio of Research Department is looking into the question of assessment. He thinks we will probably administer the CTBS during the last week of the project.

It also has been suggested that we do an attitude survey among students and teachers for report purposes.

A materials evaluation form was developed to enable documentation of which materials were or were not effective and how they were used in the program. It is hoped that this information will be useful for any possible continuations of this project.

CONTACTS MADE:

Robert Guercio--Research Department
Shirley Smith--Dean of Instruction, Hamilton Middle School.
She gave feedback concerning her perceptions of our project. Her comments were very favorable.

PROJECT STATUS REPORT
TEAMS SUMMER PROJECT
Submitted by: Sherry Irby
7/25/86

CULLEN MIDDLE SCHOOL

Status: 6 students attending on regular basis.
Comments: Teachers and students are finishing up regular instruction, are beginning review of TEAMS objectives, and are preparing for testing. There is a high concentration on writing skills using word processor.

DEADY MIDDLE SCHOOL

Status: 12 students attending on regular basis.
Comments: Teachers and students are finishing up regular instruction and are beginning review of diagnosed problem areas in preparation for testing. They are continuing work on study skills and are continuing work in advanced areas, as well.

HAMILTON MIDDLE SCHOOL

Status: 2 students attending on regular basis, 2 other students regularly attended until 7/25 (absences unexplained at this time).
Comments: Teachers and students are working on finishing up regular instruction and are beginning review of diagnosed problem areas and study skills. Extra practice time given to reading skills.

GENERAL SUGGESTIONS FOR PROJECT:

Evaluation--CTBS will be used at all sites for evaluation purposes. Testing will be monitored by teachers following proper timing and procedures.

CONTACTS MADE:

Robert Guercio--Research Department

PROJECT STATUS REPORT
TEAMS SUMMER PROJECT
Submitted by: Sherry Irby
8/01/86

CULLEN MIDDLE SCHOOL

Status: 6 students attending on regular basis
Comments: Teachers and students reviewing TEAMS objectives and preparing for testing.

DEADY MIDDLE SCHOOL

Status: 12 students attending on regular basis
Comments: Teachers and students reviewing diagnosed problem areas in preparation for testing, working on test-taking skills, and continuing work in advanced areas as well.

HAMILTON MIDDLE SCHOOL

Status: 2 students attending on regular basis
Comments: Teachers and students reviewing diagnosed problem areas and study skills. Extra practice time given to reading skills.

NOTES:

Evaluation--CTBS will be distributed to all sites on Monday, August 4, by Sherry Irby. Testing will be monitored by teachers following proper timing and procedures.

T-Shirts and trophies will be given to students by Sherry Irby on Wednesday morning, and pictures will be taken by DOT photographer.

Final faculty meeting will be held at DOT, Thursday at 10:30 a.m. Final materials should be turned in at this time (e.g., certain print and videotape materials, final summary report from each site concerning teachers' final comments and impressions).

SCHEDULE F

RESEARCH RESULTS

HOUSTON INDEPENDENT SCHOOL DISTRICT

3830 RICHMOND AVENUE
HOUSTON, TEXAS 77027-5838

Joan M. Raymond
General Superintendent of Schools

(713) 623-5

October 23, 1986

To: Richard Smith
Ellen Murphy

From: Robert Quercio RQ

Subject: Summer TEAMS Preparation Data Analysis

Attached is the analysis of ITBS and CTBS data of program participants required by the funding agency. As outlined in the proposal, I am forewarding this analysis for inclusion in your final report to the funding agency. The data indicate that 11.9 percent of the students enrolled in this program improved in academic performance and 83.1 percent maintained their skill levels from the previous year. Overall, this was an increase of approximately 17 percent in the number of students maintaining or improving their skill level over the baseline prior to program participation.

CTBS subtest matches revealed students correctly answered 72 percent of the items in writing, 58 percent of the items in reading, and 70 percent of the items in math. Students improved in math more than any other area. Reading skills were maintained.

Even though the program objective of improving performance of 70 percent of the program participants was not met, the direction of the results are encouraging. Based on this, it is recommended that this pilot project be expanded. The program must, however, wait and see how many 1986 participants pass the TEAMS. Additionally, before any expansion of this project, cost-effectiveness issues and a review of the software utilized in reading and language arts should be carefully considered.

Approved by:

Ronnie Veselka

Ronnie Veselka, Executive
Manager, Instructional Support

Joe Stubbs

Joe Stubbs, Manager IV
Planning, Research, and Evaluation

Michail Mauldin

Michael Mauldin, Executive
Director, Evaluation

Esther Sumartojo

Esther Sumartojo, Assoc. Dir.
Director, Evaluation

Summer TEAMS Project

This project was designed for eighth grade students considered at-risk for failing the ninth-grade TEAMS test. Students volunteered to participate in a summer program designed to prepare them for upcoming TEAMS tests. Instructional objectives used in the program were the TEAMS objectives. The program established an objective of improving the percentile ranking, relative to group norms, of at least 70 percent of the students who participated in the program, as measured by proficiency and/or standardized test scores.

Standardized test data from the Iowa Test of Basic Skills (ITBS) were obtained, to establish a baseline, from student master files for the 1984-85 and 1985-86 school years on 11 of 17 students participating in this program. The Comprehensive Test of Basic Skills (CTBS) was administered to 17 students who attended at least 80 percent of all scheduled classes in the program. Students were tested with Form U/Level H (8th grade) of the CTBS by program teachers during the last week of July and the first week of August. ITBS and CTBS data were collected on four subtests: Reading Total, Math Total, Vocabulary, and Language Total. All scores were reported in normal curve equivalents (NCE's).

A confidence interval was calculated around each student's score on the ITBS and the CTBS and the degree of overlap between the two interval bands was examined. If any overlap was present between the ITBS and CTBS confidence intervals, then no real differences would be thought to exist between the scores. If, however, there were no overlap between the intervals, then the scores could be considered different.

A comparison was made of the ITBS scores on eleven students from 1984-85 to 1985-86 to establish annual performance trends before participation in the program. This comparison indicated that 65.85 percent of the students obtained essentially the same scores, maintaining their ability, in all four subtest areas. 12.19 percent of the students demonstrated growth in an academic area and 21.69 percent of the students decreased in an academic area. Overall, 78.04 percent of the students, maintained or improved their academic performance on the ITBS in regular instruction prior to program participation.

The ITBS confidence intervals from 1985-86 were then compared with the CTBS intervals from summer, 1986 to establish performance trends associated with participation in the program. The results of this comparison indicate that 83.1 percent of the students maintained their skill levels, 11.9 percent obtained an increaase in their performance and 5.0 percent obtained a decrease in performance. Overall, 95 percent of the students enrolled in the summer program maintained or improved their academic performance, as measured by the CTBS, at the conclusion of this program.

The CTBS allowed a further analysis of student performance by matching specific instructional objectives with CTBS subtests. The summer program identified 11 specific objectives in writing, reading, and math that are measured on the TEAMS. The CTBS matches the TEAMS on five objectives in writing. They are: recognition of correctly spelled words, puncutuation skills, capitalization skills, distinguishing complete sentences from run-ons and/or fragments, and proofreading skills. In these areas, the summer students correctly answered 72.51 percent of all items. They obtained their highest percentage of correct answers, 77 percent, in the recognition of correctly spelled words. The lowest percentage of correct answers, 62 percent, was obtained in distinguishing complete sentences from run-ons and/or fragments.

In reading, there are four matches between the TEAMS and the CTBS: identifying the meaning of words, identifying significant details, identifying the main idea,and identifying accurate generalizations from a given series of details. In these areas, the students correctly answered 58.07 percent of all items. It should be noted that three students did not complete all of the reading subtests and may have contributed to the low percentage of correct items answered. The students obtained their highest percentage of correct answers, 69 percent, in identifying accurate generalizations from a given series of details. The lowest percentage of correct answers, 53 percent, was obtained in identifying the meaning of words.

In math, there are four matches between the TEAMS and the CTBS. They are: addition and subtraction of fractions, multiplication and division of fractions, solving two or three step word problems, and solving word problems involving metric/customary measurements. In these areas, the students correctly answered 70.19 percent of all items. They obtained the highest percentage of correct answers, 76 percent, in addition and subtraction of fractions. The lowest percentage of correct answers, 62 percent, was obtained in solving word problems involving metric/customary measurements.

The comparison of 1984-85 with 1985-86 ITBS scores indicated that about 78 percent of the students maintained or improved in performance. Yet 95 percent of these students who participated in this summer program were able to maintain or improve their academic skills by the end of the program. This improvement indicates a 17 percent increase in performance across all areas measured. Whereas most students typically experience a regression in academic skills during the summer, these gains may reduce the time spent by the participants in the fall relearning these skills.

When comparing ITBS with CTBS scores, students improved in mathematics more than in any other academic area. Four students showed real growth in math, two in vocabulary, and one in language. All students maintained their reading skill level. Two students declined in language and one in vocabulary at the time of testing. This may mean the software associated with teaching reading and language arts needs to be reviewed.

The program did not meet the established objective of improving the percentile ranking of at least 70 percent of the students on a standardized measure. One possible reason why this objective was not met may be due to the small sample size. To obtain this objective with the CTBS, 12 of the 17 students would have to have improved their ranking. However, the program did increase the percentage of students who maintained their skills.

Based on the overall positive trend in the direction of skill maintenance, we are recommending an expanded pilot project for next year. However, a number of factors must be reviewed before starting the expanded pilot. For instance, how many of the 1986 program participants will pass the ninth-grade TEAMS test? This group will be followed to determine passing rates on TEAMS. A comparison will be made between the 17 students that attended over 80 percent of the summer classes and other students in the program who did not meet this attendance requirement.

A cost-effectiveness study of the program is also recommended. Additionally, a review of the software utilized in reading and language arts appears to be justified in light of the small number of cases in which students improved in these areas.